HISTORIC AMERICAN LANDSCAPES SURVEY

JOHN BARTRAM HOUSE AND GARDEN

(Bartram's Garden)

HALS No. PA-1

Location: 54th Street and Lindbergh Boulevard, Philadelphia, Independent City,

Pennsylvania.

Present Owner: City of Philadelphia.

Present Occupant: The John Bartram Association.

Present Use: Historic botanic garden, public park, and offices of the John Bartram

Association.

Significance: Bartram's Garden is the oldest surviving botanic garden in the United

States. John Bartram (1699–1777), the well-known early American botanist, explorer, and plant collector founded the garden in September 1728 when he purchased a 102-acre farm in Kingsessing Township, Philadelphia County. John Bartram's garden began as a personal landscape, but with a lifelong devotion to plants grew to become a systematic collection as he devoted more time to exploration and the discovery of new North American species and examples. Its evolution

over time both reflected and fostered Bartram's vital scientific

achievements and important intellectual exchange. Although not the first botanic collection in North America, by the middle of the eighteenth century Bartram's Garden contained the most varied collection of North American plants in the world, and placed John Bartram at the center of a

lucrative business centered on the transatlantic transfer of plants.

Following the American Revolution, Bartram's sons John Bartram, Jr. (1743–1812) and William Bartram (1739–1823), continued the international trade in plants and expanded the family's botanic garden and nursery business. Following his father's lead, William became an important naturalist, artist, and author in his own right, and under his influence the garden became an educational center that aided in training a new generation of natural scientists and explorers. William's *Travels*, published in 1791, chronicled his own exploration efforts and remains a milestone in American literature. After 1812, Ann Bartram Carr (1779–1858), a daughter of John Bartram, Jr., maintained the family garden and business with her husband Colonel Robert Carr (1778–1866) and his son John Bartram Carr (1804–1839). Their commercial activities

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remained focused on international trade in native North American plants, although domestic demand also grew under their management.

In 1850, financial difficulties led to the historic garden's sale outside the family to Andrew M. Eastwick (1811–1879), who preserved it as a private park for his estate. Upon Eastwick's 1879 death, a campaign to preserve the garden was organized by Thomas Meehan (1826–1901), in Philadelphia, with national assistance from Charles S. Sargent of the Arnold Arboretum in Boston, Massachusetts. In 1891, control of the site was turned over to the City of Philadelphia and it remains protected as a city park. Since that time, the John Bartram Association, formally organized in 1893, has overseen preservation efforts and historical comprehension of the garden, the John Bartram House, and a number of surviving outbuildings.

Presently, the garden's plant collection includes only a few extant examples dating from the Bartram family occupancy; however, documentation for what was once in cultivation is rich. More importantly, despite wanting care and interpretation during the first century of public ownership and the disappearance of a number of subsidiary physical elements in the landscape, the garden's rectilinear framework designed and laid out by Bartram during the second quarter of the eighteenth century is still recognizable. Bartram's Garden's physical endurance and resonant associative meanings make the site an unparalleled location for comprehending an array of historical facets related to John Bartram, eighteenth- and nineteenth-century botanic studies, the North American plant and seed business, and period domestic life in Philadelphia.

Historian: Joel T. Fry

PART I: HISTORICAL INFORMATION

Introduction: Soils, Plants, Personalities, and Boundaries

Bartram's Garden, a National Historic Landmark, is located on the west bank of the Schuylkill River in Philadelphia, Pennsylvania, in an area historically known as Kingsessing. The site of one of the earliest botanic gardens in North America, the Bartram house and garden are located on a natural terrace, rising forty-five to fifty feet above the Schuylkill River. The well-watered terrace slopes downward toward the river, and has a southeasterly exposure overlooking a large area of floodplain. Within a small area of roughly eight to ten acres, the site encompasses a number of microenvironments. The garden itself is bounded by low hills to the north and the south, which provided a variety of exposures. Portions of the garden soil are a deep sandy or silty loam, while others are poorly drained, dry, or even rocky. Historically, tidal flats and marshes were located to the north and south of the garden site, and several fresh-water springs and small streams were present in the garden and its near vicinity. John Bartram utilized a spring in the lower garden to cool a milk house and feed a small fresh water pond. The garden was the site of an historic river fishery that exploited the yearly runs of shad and other anadromous fish. ¹

The source of this rich physical environment is the convergence of two physiographic provinces, the Coastal Plain (or Inner Coastal Plain) and the Piedmont. The low, generally sand-based soils of the coastal plain butt up against the upland, rock-based soils of the piedmont. A major continental fault, the "Fall Line," forms the boundary between these two provinces. Trending to the northeast, the Fall Line generally marks the limits of tidewater navigation in the rivers of the eastern of North America. At Bartram's Garden a small portion of the Fall Line is visible in the rock outcrop at the east edge of the garden. The complex interaction between soils from the coastal plain and piedmont results in a number of distinctive soils at Bartram's Garden. It may well have been the distinctive soils and diverse microenvironments that led John Bartram to choose this site for his garden in 1728. Recent U. S. Department of Agriculture soil surveys classify the site rather simplistically as Urban land–Howell Complex, in this case a Howell silt loam on the coastal plain terrace.³

A 1996 soil survey commissioned by the John Bartram Association concluded the garden site had a much more complex soil categorization with eight or more distinct soils showing elements similar to the following published soil series in Bucks and Philadelphia Counties: Manor Series,

¹ The rocky outcrop along the river bank at the southeast corner of the original garden property served as a good base for fishing in a section of the river largely bounded by marshes. Bartram family deeds of trust that split John Bartram, Jr's. estate into thirds in December 1814 specifically mention the "Fishery on Schuylkill." Philadelphia County Records, Deed Book MR–12–411, Philadelphia, Pennsylvania.

² John L. Cotter, Daniel G Roberts, and Michael Parrington, *The Buried Past: An Archaeological History of Philadelphia* (Philadelphia: A Barra Foundation Book, University of Pennsylvania Press, 1992), 2-3.

³ U. S. Department of Agriculture, Soil Conservation Service in cooperation with Pennsylvania State University, *Soil Survey of Bucks and Philadelphia Counties, Pennsylvania* (Washington, D.C.: U. S. Department of Agriculture, 1975), 109, sheet 98. Based on aerial photography, this general soil survey did not map the areas of rock outcrop at the site.

Chester Series, Glenelg Series, Urbana Series, Glenville Series, Steinsburg Series, Howell Series, Woodstown Series, Fallsington Series, and Hatboro Series. Soils at the garden site vary according to drainage and mineralogy. The mineral origins are silt loam loess, decomposed sandstone with quartzite pebbles in varying percent, and micaceous schist and gneiss. These soils can be deep and well drained, moderately drained, or poorly drained. They can also be shallow to moderately deep and well to excessively drained. Deep well-drained loess soils occur west of the Bartram House. Well-drained sandy clay and silty clay soils are found on the terrace around the Bartram House. Moderately to poorly drained clay soils appear in the Lower Garden, in the vicinity of the Pond and continuing to the river. Along the southern edge of the historic garden is a large area of excessively drained, sandy gravel, which makes up the large Eastwick hill to the south.

The garden site is largely "wooded" at present with a dense canopy of individual specimen trees and shrubs. A small number of these plants are historic survivors, but most are late-nineteenth or twentieth-century plantings—replacements for known historic trees, and more often as specimens of plants known or thought to have been in the Bartram collection. A number of wild seedlings have also become established, particularly in un-maintained areas along the borders of the park property, and in the northern meadow tract. The present collection of plants is heavily biased toward trees and large shrubs, those plants most adapted to survive neglect. Very few of the tender plants—annuals, biennials, and perennial herbaceous plants, and food and fruit plants that once made up the Bartram collection are now represented at the site.

John Bartram founded Bartram's Garden in the autumn of 1728 when John Bartram purchased an improved farm of a little over 100 acres on the lower Schuylkill. This farm had been part of a much larger plantation on the west bank of the Schuylkill known as Aronameck, first occupied in 1648 during the Swedish colonial settlement of the Delaware Valley. Bartram, a third-generation Pennsylvania Quaker, from nearby Darby, began the construction of a stone farmhouse soon after the purchase, whose initial manifestation was completed by 1731. Bartram probably first planted a kitchen garden at the site in 1729.

Bartram probably chose this favorable site with the intention of establishing a large garden, and the location remains well suited to the cultivation of plants today. The initial garden was probably laid out at six or seven acres, and expanded to as large as ten acres in succeeding generations. Additional space was set aside for an orchard, greenhouses and framing, and nursery beds, which totaled as much as twelve acres at the peak of the garden in the 1830s. John Bartram's garden began as a personal garden, but grew to a systematic collection of native and exotic plants as Bartram devoted more time to exploration and discovery. Exchanges of plants and seeds from gardens in North America and abroad also fueled the collection. Although not the first botanic collection in North America, by the middle of the eighteenth century, Bartram's Garden contained the most varied collection of North American plants in the world.

⁴ Laurel F. Mueller, "Soil Mapping & Classification, Historic Bartram's Garden, Philadelphia, Pennsylvania," Soil Services Company, Inc., 1997, Philadelphia, Pennsylvania, copy located in John Bowman Bartram Special Collections Library (hereafter JBBSCL).

Around 1733, in an event important to the general history of horticulture and natural science, John Bartram introduced himself via letter to London merchant Peter Collinson (1694–1768), and the two began a lifelong correspondence. Collinson, a member of the Royal Society, and like Bartram a Quaker and an enthusiastic gardener, became the middleman to a scientific trade in seeds, plants, and natural history specimens. Plants from Bartram's Philadelphia garden were exchanged with a range of botanists, gardeners, and nurserymen in London and throughout Europe. Collinson also arranged funding from patrons among the British elite, which allowed Bartram to leave his farm and go plant hunting. During his career John Bartram traveled widely throughout the British colonies in North America—plant collecting began in the Mid-Atlantic colonies of Pennsylvania, New Jersey, Delaware, and Maryland. In time, Bartram traveled north to New York and New England, and south to Virginia, the Carolinas, Georgia and Florida, exploring a region spanning from Lake Ontario in New York to the St. John's River in Florida, and from the Atlantic coast to the Ohio valley.

As John Bartram tended his garden, he established a family institution that survived him and grew under the care of three generations of his family. Following the American Revolution, Bartram's sons John Bartram, Jr. and William Bartram, continued the international plant trade their father had established, and expanded the family botanic garden and nursery business. William Bartram was an important naturalist, artist, and author in his own right, and traveled the American South from 1773–1776 under the patronage of Dr. John Fothergill. William Bartram's *Travels...* published in Philadelphia in 1791, and reissued in a number of European editions, strengthened the connection between the name Bartram and the science of plants in North America. Under William Bartram the garden became an educational center and helped to train a new generation of natural scientists and explorers. In the early Federal history of the United States the Bartram Botanic Garden served as *the* American botanic garden in lieu of any official institution in Philadelphia.

After 1812, Ann Bartram Carr, a daughter of John Bartram, Jr., continued the family garden. Ann B. Carr had been educated by her uncle, William Bartram, and inherited his skill for illustration and the family passion for plants. With her husband Colonel Robert Carr and his son John Bartram Carr the international trade in seeds and plants was continued from Bartram's Garden and the site was enlarged as a commercial nursery. At its peak the garden featured ten greenhouses and a collection of over 1400 native plant species, and as many as 1000 species of exotics, many under glass.

Financial difficulties led to the sale of the family garden by the last of the Bartram descendents in 1850. The new owner Andrew M. Eastwick, a wealthy railroad industrialist, preserved the historic garden as a private park on his estate. At Eastwick's death in 1879, the garden site was threatened by the expansion of the city of Philadelphia and the movement of industry to the lower Schuylkill. A campaign to preserve the garden was organized by the nurseryman and writer, Thomas Meehan, in Philadelphia, and Charles S. Sargent of the Arnold Arboretum in Boston. In 1888, after a long political fight the historic garden was placed on the city plan and slated for preservation; in 1891, control of the site was turned over to the City of Philadelphia. It has remained protected as a city park since then.

Today, John Bartram's House and Garden and part of his original plantation are preserved in a city park of approximately 45.5 acres, administered by the Fairmount Park Commission and maintained and interpreted by the John Bartram Association. The house and garden were first

set aside for preservation by city ordinance in 1888 in two adjacent tracts totaling 11.08 acres.⁵ An additional parcel of 16.213 acres was added to the south in 1896.⁶ More recently, in 1981, a triangular area to the north of the historic garden was acquired and reclaimed as park land.⁷ This northern meadow tract of 17.28 acres along the Schuylkill had suffered from intense industrial activity and was excavated well below historic grade. Its reclamation as park land involved several years of fill and grading to return it to a level approximating historic grade. In 1998 an additional triangular tract of 0.9 acres at the entry to the park, north of the historic garden, was added.⁸ This addition now houses a new administration and maintenance complex for the John Bartram Association.

The entire park has a long river frontage along the lower Schuylkill. It extends from the CSX Railroad bridge south of Grays Ferry Avenue to 56th Street. The historic botanic garden is located near the middle of this frontage, and preserves a small segment of natural river bank. The Bartram house and outbuildings sit on an elevated terrace overlooking the river, and the garden fills the protected slope that runs east from the house to the river. North of the botanic garden is the large northern meadow, recently reclaimed from industrial use. To the south, on a prominent hill is the former site of the Eastwick house, "Bartram Hall," now the location of a park picnic pavilion. A second meadow is found further to the south, where the elevation drops to river level. This has been the site of a playground and playing fields for much of the twentieth century. The southeast corner of the park is now occupied by a restored tidal wetland of 1.1 acres, which was constructed in 1996. West of the Bartram house and botanic garden, across the deep railroad cut, a small rectangular tract remains underutilized. Once part of the Bartram family orchard, this tract has been neglected for several decades and is covered with overgrown remnants from a planting plan of the late 1930s. The newest acquisition to the park is located

⁵ Deed, Pennsylvania Company for Insurance on Lives and Granting Annuities to the City of Philadelphia, May 23, 1893, Philadelphia County Records, Deed Book TG-316-257. The initial plan for preservation at Bartram's Garden called for a very small park to be bounded by the city grid—Eastwick Avenue to the west, 53rd Street to the north, 54th Street to the south, and the Schuylkill River to the east. Fortunately for the site's future, these streets were never built, probably on account of the expense of bridging the railroad cuts. The park's initial eleven-plus acres included the Bartram house, surviving outbuildings, and most of the botanic garden in a tract of 8.74 acres, with an additional smaller, rectangular piece of 2.34 acres located to the northwest of the 1838 railroad cut. This small rectangle once preserved a portion of the Bartram orchard. It was not included in the measured drawings completed as part of the 2002 HALS survey of the garden, although some photographic views were taken of the area.

⁶ Deed, Pennsylvania Company for Insurance on Lives and Granting Annuities to the City of Philadelphia, June 17, 1897, Philadelphia County Records, Deed Book WMG-192-155.

⁷ Deed, Warner Company to the City of Philadelphia, February 9, 1981, Philadelphia County Records, Deed Book D-153-367.

⁸ Deed, Kathy A. Alexander, executrix of the estate of Charles H. Mitchell to the John Bartram Association, July 9, 1998, Philadelphia County Records, Deed Book JTD-733-240.

⁹ The John Bartram House and Garden are oriented a considerable degree from the true cardinal directions. The garden and the primary façade of the house actually face the southeast. For ease of description, in this report the garden will be said to face east, toward the Schuylkill River.

north of the entry lane, to the north of this rectangular tract. In private hands until recently, the house on the site was razed and a new administration building for the John Bartram Association built in part on the footprint of the small dwelling.

The summer 2002 Historic American Landscapes Survey (HALS) of Bartram's Garden dealt with only a portion of the forty-five acre park. It concentrated on mapping the historic botanic garden, an area of between ten and eleven acres. The HALS survey team adopted the area of the historic garden fenced for interpretation in 1999. William Bartram described the family garden in 1807:

They are situated on the west banks of the Schuylkill, four miles from Philadelphia, and contain about 8 acres of land. The mansion and green houses stand on an eminence from which the garden descends by gentle slopes to the edge of the river; and on either side the ground rises into hills of moderate elevation, to the summits of which its borders extend. ¹⁰

Still the exact bounds of the Bartram garden are not precisely known. There is no doubt it occupied the sloping terrace land east of the house to the river, but its extent to the north and south remains ambiguous. It is also unclear how far west of the Bartram House the botanic collection extended. This uncertainty is due in part to the expansion of the garden over time. The boundaries of the historic garden were already obscured in 1888 when Bartram's Garden was set aside for preservation. The initial park of eleven acres did not include a sizable strip along the south border, which still contained many trees planted by the Bartram family. The choice for the south line to the park in 1888 seems to have been arbitrary, and may have had more to do with cost constraints or the location of 54th Street, which was to have formed the south boundary. The additional sixteen acres added to the park to the south in 1896 was intended to acquire the site of the Eastwick House, but was also necessary to protect the full extent of the surviving botanic collection.

As a result of historic research and the limited archaeological testing of recent years there is a better understanding of the historic garden, and the southern boundary can be established with some certainty. The Bartram house and garden were located in the far southeast corner of the 102-acre property John Bartram purchased in 1728. This location was partly determined by the suitable garden site, but also by the preexisting Swedish colonial homestead on the farm. A one-room log house probably sat near the future site of John Bartram's stone house and the future garden site may have represented most if not all the cleared land on the farm. Deeds defined the farm's southern boundary prior to John Bartram's purchase and similar language appears in the description of deeds that follow. In each case a large rock on the bank of the Schuylkill served as a landmark for the boundary. Fortunately this rock, a portion of the bedrock outcrop that runs

¹⁰ [William Bartram], A Catalogue of Trees, Shrubs, and Herbaceous Plants, Indigenous to the United States of America; Cultivated and Disposed of By John Bartram & Son, At their Botanical Garden, Kingsess, near Philadelphia (Philadelphia: Bartram and Reynolds, 1807), 6-7.

¹¹ Deed, Owen Owens, Sheriff to John Bartram, September 13, 1728, Philadelphia County Records, Deed Book GWC-41-356. More detail on the location of the south boundary will follow in the body of this report.

across the lower section of the garden, remains extant. The deed descriptions begin at the middle of this rock, at a post or notch, and run northwest to another corner. The large notch is still apparent in the middle of this rock. Since 1999 a four-rail fence bounding the interpreted historic garden has marked this south line of Bartram's original farm. ¹² This interpretation of the south boundary correlates well with the surviving tree collection, and with maps and descriptions of the site from the late-nineteenth and early-twentieth centuries. This same line formed the boundary of the property owned by the third generation of the Bartram family at the garden, Ann and Robert Carr. At its peak, the garden extended to this line, but probably not beyond.

The Schuylkill River defines the eastern boundary of the historic garden. Practically, the garden may have ended at the top of the rock outcrop, which occurs just before the river's edge. ¹³ East of this ledge, the land drops eight to ten feet to a largely marshy area along the river flood plain. This low land was probably diked and drained as a meadow during the Bartram occupation, with the exception of the southeast corner where rock continues to the edge of the river. This is the location of the boundary rock and also the site of the foundations of a cider mill, carved into the bedrock. Some stone was quarried from this outcrop for construction on the site, but it was not the source of the finer stone used for the east façade of the Bartram house.

The historic garden's northern boundary is the most questionable. The line chosen by this survey again follows the interpretive fence laid out in 1999, which roughly follows the northern boundary of the original city park property. This line was arbitrarily chosen in 1888, and located to include a cluster of historic outbuildings at the site. Any portion of the historic Bartram garden or farm that extended to the north, beyond this line, would have been destroyed by twentieth-century industrial activity on the tract. The north meadow tract remained associated with the botanic garden throughout the Bartram period, and garden or nursery beds, outbuildings, and greenhouses might have extended beyond the arbitrary 1888 line, particularly during the Carr period at the garden.

The western boundary is physically defined by a deep railroad cut. This was created in 1838 by the completion of the Philadelphia, Wilmington and Baltimore Rail Road, then the first rail route south out of Philadelphia. The initial single-track line was cut through the Carr property, probably in a section then in use as a vegetable garden and vineyard with an orchard that extended further to the west. The railroad cut was widened and enlarged to two tracks latter in the nineteenth century. The Carrs maintained an area of formal garden west of the Bartram House, which then extended to the large vegetable garden and vineyard. It is not known if any

¹² The 1999 fence line marking the garden's southern boundary was laid out five feet south of the measured historic boundary in order to allow for error. The 2002 HALS mapping began on the south with this fence line.

¹³ This rock ledge runs in a line roughly true north, angled to the alignment of the garden site.

¹⁴ The fence along the northern boundary was laid out as trees and undergrowth allowed. As result, it is for the most part located several feet short of the 1888 boundary with the meadow.

of these plantings date to either John or William Bartram, or how this area was utilized by the earlier generations at the garden. There may have been considerable alteration in this western area over time as the garden expanded.

Prehistory

Human settlement in the neighborhood of Bartram's Garden extends back beyond recorded history. The presence of a level terrace overlooking large areas of river flood plain, fresh water sources, and close proximity to river and marsh resources, all indicate a high probability for prehistoric settlement at the Bartram site. Food sources would have been abundant in the river, marsh, and surrounding forest. Artifacts recovered during archaeological excavation at the site indicate a prehistoric occupation by Native Americans from the Archaic to the Late Woodland Periods, ca. 3000 BCE–1550 CE.

Prehistoric evidence at the Bartram site consists mainly of lithics—stone artifacts, flakes from tool production, and fire-cracked rock—scattered over a large area in low concentrations, with a few small fragments of prehistoric ceramic. A wide variety of lithic types are present at the site, including jasper, quartz, quartzite, chert, argillite and slate. Several of these stone types are not found locally, and could only have been acquired by travel or trade. The prehistoric collection of artifacts is small in number, and as yet no prehistoric artifacts have been found associated with any identifiable archaeological features—postholes, pits, hearths, house sites, etc. This prehistoric collection is best interpreted as the result of small-scale seasonal occupation of the garden site and vicinity over a long period of time.

Prehistoric lithics have been found mixed at the base of historic occupation stratigraphy, and undisturbed, in tests beneath the historic levels. Scattered finds occurred in various disturbed horticultural features, but generally the greatest concentration of prehistoric artifacts occurred at the base of historic deposits. There was, of course, intensive hand cultivation throughout the garden during the historic period, and the meadows and agricultural to the north and south and west were plowed, but this has not destroyed all prehistoric stratigraphy. During archaeological excavation in 1980, a large concentration of prehistoric remains came from an open area between several known historic structures, an area which may have served as a path or drive. Excavation within Room #2 of the Seed House revealed a prehistoric site partially intact beneath the historic structure. An archaeological survey prior to wetland restoration in the south meadow in 1996 also produced prehistoric evidence. A Woodland Period site, possibly a Late Woodland site, remained just above the bank of the Schuylkill River adjacent to a tidal creek mouth. Preliminary archaeology along the south fence line to the historic garden in 1997 also produced a broad scatter of lithic materials, the densest deposit yet encountered at the garden site. It is probable that similar glimpses of the prehistoric past are scattered over the Bartram garden wherever historic construction or gardening activities have not destroyed them. This is certainly a rare situation in Philadelphia County today, especially along the lower Schuylkill. 15

¹⁵ While the physical setting of the city of Philadelphia—primarily sited on or overlooking the floodplain between two rivers—presents an ideal location for prehistoric human habitation, physical evidence for prehistoric occupation is almost non-existent. A 1992 summary of archaeological research in Philadelphia states flatly: "no undisturbed prehistoric site has yet been excavated in Philadelphia or its immediate environs."

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Bartram's Garden is one of only a handful of identified prehistoric locations in Philadelphia County. It is likely the only location remaining on the Lower Schuylkill with any prospect for prehistoric archaeology, and as such, is a significant resource. At the conclusion of archaeological testing in 1996, a 20-acre section of the garden park was recorded on the Pennsylvania Archaeological Site Survey of the Pennsylvania Historical and Museum Commission as site **36 PH 14**.

The range of tool types and materials recovered from previous excavations indicates long-term occupation of the Bartram site, but as yet there is no evidence of any large-scale prehistoric settlement or of permanent sedentary occupation. It is more likely that the site of Bartram's Garden provided a convenient base camp for collecting river or marsh resources and was occupied seasonally for short periods, perhaps over many thousands of years. The point types recovered indicate a broad date range from the Archaic to the Late Woodland Periods, ca. 3000 BCE–1550 CE. These terms, Archaic, Woodland, etc. are generally accepted terms for Native American culture periods and refer to both time periods, and assemblages of archaeological artifacts and features, associated with the lifeways of prehistoric man (see Table No. 1).

While there is general, but not universal, agreement on the tools, site types, and way of life represented by each of these major groupings, there is no broadly accepted standard for the dates of each period. The scarcity of prehistoric sites, particularly in the Philadelphia region, and the scarcity of scientifically excavated sites as well, means there is little hard data on which to base chronologies. Dating of prehistoric sites is, of necessity, a relative procedure. Only in rare cases can an absolute date be obtained from one of several scientific dating techniques, based on radioactive decay of carbon or mineral isotopes. The dates and division of the culture sequence charted above are currently under some debate. The placement of the end of the Archaic, the beginning of the Early Woodland, and the length and dating of the intermediate Transitional or Terminal Archaic periods are particularly problematic.

Recent test excavations at another nearby historic garden site on the lower Schuylkill, a former estate called "The Woodlands" surviving as a nineteenth-century rural cemetery, revealed

(Cotter, Roberts & Parrington, 1992: 10). The physical advantages that attracted humans to the site of Philadelphia in prehistoric times also attracted historic settlement, and this development effectively destroyed most evidence of the prehistoric past. Bartram's Garden is located outside of the original historic bounds of Philadelphia proper and prehistoric remains have been recovered during most archaeological investigations occuring there since 1979. See Joel T. Fry, "Archaeological Research at Historic Bartram's Garden," *Bartram Broadside* (Summer 1998); "Phase I Archaeological Survey of Bartram's Garden Public Courtyard Project," D.E.R. Grant Task No. 89-PD, 03 (ER 89-1365-101-A), Philadelphia, Pennsylvania, 1990; "The 'Seed House' At Bartram's Garden: An Archaeological Analysis 1989-1990," Philadelphia, Pennsylvania, 1991; "Phase I Archaeological Survey of the Proposed Wetland Restoration Site: Historic Bartram's Garden," 2 vols. bound as one, Philadelphia, Pennsylvania, October 18, 1996, JBBSCL.

¹⁶ Foundations of Pennsylvania Prehistory, ed. Barry Kent, Ira F. Smith, and Catharine McCann (Harrisburg: Pennsylvania Historical and Museum Commission, 1971); Jay E. Custer, "Archaeological Resources of the Piedmont and Coastal Plain in Southeastern Pennsylvania," A Comprehensive State Plan for the Conservation of Archaeological Resources, vol. 2, ed. Paul Raber (Harrisburg: Pennsylvania Historical and Museum Commission, 1985), 25-41.

undisturbed prehistoric remains preserved as well.¹⁷ The total extent of this prehistoric site cannot yet be determined. An archaeological survey of The Woodlands in 1993 undertook limited testing, but discovered a dense lithic scatter undisturbed, sealed beneath historic strata at the base of a test unit to the east of the south portico of the historic mansion. While evidence for prehistoric occupation has certainly been disturbed or erased by historic activities in many areas at The Woodlands site, this small area was surprisingly well preserved. The probable period of prehistoric occupation at The Woodlands site also remains very broad, with a possible range of 7000 BCE–1000 CE, from the Archaic to the Early-Middle Woodland.

There is as yet no evidence of Contact Period occupation at both Bartram's Garden and The Woodlands, although a number of Contact locations were known to have existed to the south in Kingsessing, and across the Schuylkill River in Passyunk to the east. ¹⁸ In the seventeenth century both the Dutch and the Swedes traded extensively with the Lenni Lenape and the Susquehannock along the lower Schuylkill. Beginning in 1648, a 1000 acre tract of land on the west bank of the lower Schuylkill known variously as "Aronameck," "Arronemink," "Oronnmink," and "Aroenemeck" was settled as the northernmost outpost of the New Sweden colony on the Schuylkill. ¹⁹ The historic plantation of Aronameck stretched south along the Schuylkill from Mill Creek for over two miles. The original small Swedish settlement was located in a clearing, possibly a Contact village or hamlet, somewhat south of Bartram's Garden. The large tract was divided along natural boundaries and creek valleys, and further small clearings developed in the later seventeenth century, including a piece which became the site of John Bartram's farm and botanic garden.

"Aronameck Kill," an early place name on the lower Schuylkill, probably refers to the present-day Mill Creek, which runs underground in a sewer at 43rd Street, just south of The Woodlands. Mill Creek, or Aronameck Kill (also known as "Naugansey" or "Nanganesy" Creek) remained an important dividing line well into the historic period. "Aronameck" is a Lenape term of undetermined meaning, probably referring to a village or small hamlet that existed during the early Contact period. While the name Aronameck was attached to the historic plantation running south from Mill Creek, it is not known where the Native American settlement of the same name was located. Various investigators have placed it north or south of Mill Creek, from north of

¹⁷ Joel T. Fry, "The Woodlands: An Archaeological Research and Planning Survey, 1993," Philadelphia, Pennsylvania, November 21,1995, 51-54, 74-75, 123-125, JBBSCL.

¹⁸ Marshall Becker, "The European Contact/Historic Period in the Lenape Realm of Pennsylvania's Piedmont and Coastal Plain," *A Comprehensive State Plan for the Conservation of Archaeological Resources*, vol. 2, ed. Paul Raber (Harrisburg: Pennsylvania Historical and Museum Commission, 1985), 25-41; and "Lenape Maize Sales to the Swedish Colonists: Cultural Stability during the Early Colonial Period," *New Sweden in America*, ed. Carol E. Hoffecker, Richard Waldron, Lorraine E. William, and Barbara E. Benson (Newark, DE: University of Delaware Press, 1995), 121-136.

¹⁹ Peter Stebbins Craig and Henry Wesley Yocum, "The Yocums of Aronameck in Philadelphia, 1648–1702," *National Genealogical Society Quarterly* 71 (Dec. 1983): 244, 250–252.

Market Street to south of Gray's Ferry.²⁰ A Lenape village could have been small, even as small as a single extended family, and town sites moved with seasonal and yearly frequency. It may be impossible to ever determine precisely where the original Aronameck was located.

²⁰ Cotter, Roberts & Parrington 1992: 18, 27, 31.

Table No.1. North American Prehistoric Culture Traditions

Culture Tradition	Dates	Primary Artifacts	Site Locations	House Types	Subsistence
Paleo Amerindian	12,000–7500 BCE	fluted points, knives, scrapers	river valleys	caves and rock outcrops?	big-game hunting in migratory bands
Archaic	7500–1000 BCE	notched and stemmed points, drills, axes, mortars and pestles, soapstone vessels	along small streams in uplands and on floodplains	circular bark- covered wood frameworks	migratory hunting, seasonal plant food gathering
Transitional or Terminal Archaic	1800–800 BCE	broad leaf-shaped points added to archaic toolkit, increased frequency of soapstone vessels	floodplains of major rivers	circular bark- covered frameworks	fishing and some migratory hunting, seasonal plant gathering
Early-Middle Woodland	800 BCE-1000 CE	stemmed, lanceolate points, continuation of archaic toolkit, ceramic vessels replace soapstone	floodplains of major rivers	circular to oval bark-covered framework dwellings, small settlements	increasingly sedentary hunting and fishing economy, beginnings of horticulture
Late Woodland	1000–1550 CE	small triangular points, bow and arrows, refined ceramic vessels, hoes and other horticultural tools	floodplains of major rivers	oval houses in villages or small hamlets	agriculture plus hunting, fishing and seasonal foraging
Contact	1550 CE–onward	late woodland toolkit increasingly replaced by European tools and goods	original home territories abandoned, migration inland and westward	traditional house- types slowly replaced by Euro- American log structures	agriculture, fur- trapping and hunting, trading

Pre-Bartram History—Aronameck Plantation

The land that was to be the site of John Bartram's house and garden entered the historic record in the mid-seventeenth century with the settlement of the New Sweden colony. The earliest known historic occupation in the vicinity of Bartram's Garden dates to ca. 1648. A Peter Jochimson (ca. 1618–1654) was resident at a plantation known as Aronameck on the west bank of the Schuylkill. At this date an area of four *morgens* (eight acres) was cleared out of a much larger tract, later patented at over 1000 acres. The settlement is thought to have taken its name from a large creek at the northern boundary of the tract, Aronameck Kill, probably synonymous with the historic Mill Creek. The location of the original cleared settlement at Aronameck was probably a quarter mile, or more, south of the surviving Bartram House. At this time Aronameck was the northernmost settled plantation of the New Sweden Colony. ²¹

By 1653 and possibly as early as 1648, Jochimson shared the settlement at Aronameck with Hans Månsson (1612–1691). In July 1653, their names appeared together on a petition to Governor Printz, protesting his rule. Jochimson was sent to Manhattan on a diplomatic mission by Printz's successor as governor, Johan Rising, in May 1654. While on this mission to Stuyvesant and the New Amsterdam colony, Peter Jochimson took ill and died in late June or early July 1654. Jochimson left behind a wife, Ella Olafsdotter (1634–1718), also known as Ella Steelman, and two children, Peter Peterson, later Jochim or Yocum after his father (1653–1702), and Elizabeth Petersdotter (1654–?). Ella married Hans Månsson soon after the death of her husband, and the Aronameck plantation continued to be their primary residence.²²

A small settlement was maintained at Aronameck throughout the rest of the seventeenth century, and it probably consisted of a single extended family of relations and in-laws. Subsistence farmers who only cleared small tracts of the virgin forest for agriculture characterized the Swedish colony. They often purchased and occupied old lands previously cleared by Indians, with hunting, trapping, and fur-trading supplementing agricultural life. In this loosely structured colony, land boundaries were often only recorded as a result of changes in colonial government, or following a death. Deed records are not the best source for reconstructing the colonial community in Kingsessing and Aronameck, but unfortunately they are often all that is available to modern scholars.

The first recorded title to the Aronameck plantation does not appear until after English control of both the New Amsterdam and New Sweden colonies in 1664. On May 14, 1669, the English government patented "Hans Monsen" the Aronameck tract, described at the time as 100 acres. The patent was reissued, probably corrected, March 10, 1670 to "Hans Manson" for 1000 acres. Månsson appears in a census of heads-of-households along the Schuylkill as "Hance Mansa" in 1671. The plantation "Oronemink" was resurveyed in 1675 by Walter Wharton for "Captain

²¹ Craig and Yocum 1983: 244, 250–252.

²² Craig and Yocum 1983: 244–246, 250–252.

Hans Monson" and found to contain 1100 acres.²³ It is presumed Peter Peterson Yocum resided at Aronameck through this period with his mother and step-father. The entire Aronameck tract ran roughly between the following bounds: from the Schuylkill along 45th Street to the northwest, along Baltimore Avenue to the west, along the lines of Ameasaka Creek and Cobbs Creek, and then southeast along 61st Street to the Schuylkill River.

In 1681, Hans Månsson transferred the Aronameck land to his stepson Peter Yocum by deed of April 29 for 1100 guilders. Hånsson and his family resettled in the West Jersey colony in present Burlington County, New Jersey. Yocum immediately divided the Aronameck tract between several relatives. On April 30, 1681, he sold 270 acres to his father-in-law, Jonas Nilson, and May 2, 1681 he sold 200 acres to Nils Jonasson, his brother-in-law. The property was partitioned into rectangular parcels divided by lines drawn perpendicular to the Schuylkill River. Yocum kept the southern section of Aronameck, 580 acres, the portion likely occupied since 1648. The 270 acres sold to Jonas Nilson began at a rock on the bank of the Schuylkill, just south of the present Bartram House. Most of the current park including the future site of the Bartram house and garden lay within its bounds, but not the southern meadow tract. The southern meadow tract.

Peter Yocum sold the northernmost 100 acres of the Aronameck plantation to an English Quaker, William Clayton, Jr., August 21, 1682.²⁸ This piece of land along the northern creek border probably contained a mill site and became part of the Lower Ferry property operated in the eighteenth century and later known as Gray's Ferry.²⁹

A census of households and land compiled by Lasse Dalbo in 1683 indicates <u>very little</u> of the land at Aronameck was cleared at that date. Of the owners of this 1100-acre tract listed north to south—"William Clayton, Jr., Neils Johnson, John Neilson, John Minsterman (renting a 100-acre

²³ Craig and Yocum 1983: 253; Jeff L. Kenyon, Stan M. Hunter, and Helen Schenk, "Basic Historic Research and Archaeological Feasibility Study of Bartram Park," Museum Historic Research Center, University of Pennsylvania, Philadelphia, Pennsylvania, December 5, 1975, 2, map 2, JBBSCL.

²⁴ Deed, Hans Månsson to Peter Yocum, April 29, 1681, Philadelphia County Records, Patent Book A–1–369.

²⁵ Craig and Yocum 1983: 254.

²⁶ Deed, Peter Yocum to Jonas Nilson, April 30, 1681, and Peter Yocum to Nils Jonasson, May 2, 1681, Philadelphia County Records, Patent Books A–4–31 and C–2–142, respectively.

²⁷ The south meadow at Bartram's Garden formed the northeast corner of the 580 acres retained by Peter Yocum. The 200-acre tract sold to Nils Jonason lay to the north of his father's land (Kenyon et al. 1975: 2, map 2; Craig and Yocum 1983: 258).

 $^{^{28}}$ Deed, Peter Yocum to William Clayton, Jr., August 21, 1682, Philadelphia County Records, Patent Book A-1-16.

²⁹ Craig and Yocum 1983: 262; Kenyon et al. 1975: 2.

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tract from Yocum, possibly including the current project area), and Peter Yocumbe"—only two small parcels were cleared: ten acres of Peter Yocum's land and six acres of Nils Jonasson's land. This suggests that the site of John Bartram's garden had not been actively settled by this date.³⁰

William Penn issued a warrant for new land surveys of "antient inhabitants" in June 1683 and Yocum's remaining 580 acres were resurveyed in April 1684. This survey indicates "Mountz Jonasson" (Måns Jonasson, son of Jonas Nilson), was occupying the land just north (the future site of the Bartram garden), the 270 acre piece previously deeded to his father. Peter Yocum received a reconfirmed patent to his 580 acres on September 22, 1684 and Nils Jonasson to his 200 acres on November 22, 1684. Thomas Holme's *A Map of the Improved Port of the Province of Pennsilvania in America* (1687), records the following property holders at Aronameck running north to south along the river: "Wm Clayton, Neels Johnson, Mouns Johnson, Laurence Hedding and Peter Yocomb." Thomas Paschall had acquired patent to 500 acres of land to the west of Yocum's original 1100 acre tract. Laurence Hedding was probably a tenant on the 100 acre piece previously rented to John Minsterman.

Peter Yocum deeded a fifty-acre piece of land at the northeast corner of his Aronameck plantation to Andrew Souplis (Supplee) on March 10, 1697. Souplis was a French Huguenot weaver who had married a widow living in the Swedish colony. Souplis may have occupied this land for some years before the deed's date, and it might be the same tract which was previously rented to Hedding and Minsterman. It was located along the Schuylkill and bounded by Måns Jonasson's land to the north and a run or creek "in the flats" to the south. After Souplis' death in 1739 this fifty-acre parcel became part of John Bartram's plantation and is partially preserved as the south meadow of the current Bartram Park. 34

Jonas Nilson probably never occupied his land holdings at Aronameck, but his sons began clearing farms during his lifetime. Jonas Nilson prepared his will January 14, 1692. He died the next year and his will was proved October 23, 1693. This will gave his son Jonathan deed to 130 acres at the southernmost end of Aronameck, recently purchased from Peter Yocum. The 272 acre tract to the north of Peter Yocum and Andrew Souplis' land was divided between his sons Måns, Andreas and Nils. Måns Jonasson (Mountz Jones) received deed to the Schuylkill frontage he had occupied since ca. 1684, extending west into virgin forest for a total of one-hundred

³⁰ Craig and Yocum 1983: 262; "Returns of Inhabitants and Lands Owned and Improved in Portions of Philadelphia County in 1684," *Pennsylvania Magazine of History and Biography* 7:1 (1883): 106-107.

 $^{^{31}}$ Multiple deeds, Philadelphia County Records, Patent Books A–1–16, A–1–110, A–2–20, A–4–31; Craig and Yocum 1983: 262; Kenyon et al. 1975: 3.

³² Thomas Holme, *A Map of the Improved Part of the Province of Pennsilvania in America* (London, [1687]), reproduced in *Philadelphia: Three Centuries of American Art* (Philadelphia: Philadelphia Museum of Art, 1976), 4-5.

³³ Deed, Peter Yocum to Andrew Souplis (Supplee), March 10, 1697, Philadelphia County Records, Deed Book E–5–7–50.

³⁴ Craig and Yocum 1983: 263; Kenyon et al. 1975: 3, Map 2.

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acres; later surveys measured this piece as 102 acres. His brothers divided a 170 acre tract of land further to the west. Andreas Jonasson was given one-hundred acres and Nils was given seventy acres adjoining his own 200 acres to the north.³⁵

Måns Jonasson left his land at Aronameck and moved up the Schuylkill to land in the Swedes tract on the Manatawny Creek in present Berks County by 1704. There he built a stone house in 1716, which survives as the oldest structure in Berks County, and known as the "Mouns Jones House" in Douglassville, Pennsylvania. Whether his farm at Aronameck was rented or tenanted after he left is not known for certain, but it probably remained occupied. Peter Yocum, patriarch of the Swedish community at Aronameck, died in 1702 and his wife Judith, a sister of Måns Jonasson, and several of their children also moved to the Manatawny lands at this time. ³⁷

Måns Jonasson sold his Aronameck plantation for £75 to his sister Christina Jonasdotter (1695–?) and his brother-in-law, Frederick Schaffenhausen (Schopenhousen or Schobbenhousen) on November 19, 1712. Schaffenhausen, a German, married Jonasson's sister sometime between 1705–1708. It was her third marriage and she had a young son, Christopher Lindemeyer, from her second marriage. A female child, Anna Maria was born to the couple at Aronameck in 1707 or 1708. Deeds indicate Schaffenhausen was a weaver by trade, like Andrew Souplis, his neighbor to the south. At the time of the sale, the Aronameck tract contained 102 acres and a separate five-acre piece of marsh located elsewhere. It was described as "a certain tract of land with improvements," and wording in the deed, "said messuage or tenement," suggests an existing house or dwelling, more than likely a small log structure.

³⁵ Craig and Yocum 1983: 263, 267; Kenyon et al. 1975: 4, Map 3.

³⁶ For more information on this structure, see Historic American Buildings Survey (HABS), National Park Service, U.S. Department of the Interior, "Mouns Jones House (Ruins)," HABS No. PA–1032, and the National Register of Historic Places nomination form for the "Mouns Jones House," Washington, D.C.

³⁷ Craig and Yocum 1983: 267.

³⁸ Deed, Måns Jonasson to Frederick Schaffenhausen (Schopenhousen or Schobbenhousen), November 19, 1712, Philadelphia County Records, Deed Book E–7–9–19. An original registrar's copy of this deed descended through the Tussey family and remains in a private collection; photocopy, JBBSCL.

³⁹ Peter Stebbins Craig, *The 1693 Census of the Swedes on the Delaware*, Studies in Swedish American Genealogy, vol. 3 (Winter Park, FL: SAG Publications, 1993), 61; Peter Stebbins Craig, "Some Corrections for the 1693 Census of the Swedes on the Delaware," *Swedish Colonial News* 2 (Spring 2001): 6. Peter Craig has corrected a longstanding confusion over the connection of Frederick and Christina Schaffenhausen with Måns Jonasson. It was long thought Christina was Jonasson's daughter, born in 1695, but it is now more certain that she was his sister. Jonas Nilsson's daughter, Christina Jonasdotter, the sister of Måns Jonasson, was married three times: to Frederick Fredericksson, King of Senamensing, dying in 1696, to Nicholas Lindemeyer from Stockholm, dying in 1705; and finally to Schaffenhausen, a German, dying before 1728.

⁴⁰ This dwelling, probably constructed by Måns Jonasson, was long thought to be part of the core of the existing Bartram House; the 2001 HABS investigation of the John Bartram House disproved this assumption. See Historic American Buildings Survey (HALS), National Park Service, U. S. Department of the Interior, "John Bartram House and Garden, House," HALS No. PA–1–A.

Frederick Schaffenhausen died prior to 1728 and his estate was apparently in debt. His property at Aronameck was seized and sold at public sale by the Philadelphia sheriff on a writ brought by Christopher Lindemeyer, Christina's own son. At this point John Bartram enters the history of the land.⁴¹

The First Generation: John Bartram, His Garden, and His Business

John Bartram purchased a 102-acre tract of land with a "tenement," and two pieces of marsh land totaling 10.5 acres at sheriff's sale for £145 on September 13, 1728.⁴² By John Bartram's time the name "Aronameck" was apparently abandoned. Bartram's farm was part of the township or district of Kingsessing, a subdivision of Philadelphia County, which had been established in 1682.

John Bartram, the botanist, was the son of William Bartram (1674–1711) and grandson of John Bartram (1650–1697) of Ashborne, Derbyshire, England, a member of the Religious Society of Friends, who immigrated to Pennsylvania along with his wife Elizabeth, three young sons, and a daughter in 1683. They settled on a farm on the west bank of Darby Creek in Chester County Pennsylvania. The grandfather, John Bartram, had been imprisoned in England for his religious beliefs, and he and his family were active in creating the new settlement of Darby in Pennsylvania. ⁴³

Bartram, the botanist, grew up in the new Quaker community at Darby, just outside of Philadelphia. Young John Bartram was largely raised by his close relations. His mother, Elizah Hunt Bartram (ca. 1676–1701), died only two years after he was born, leaving two surviving children, John and his brother James Bartram (1701–ca. 1765). His father, William Bartram, remarried in 1707, and after remarrying, William Bartram acquired two tracts of land at Bogue Sound, on the White Oak River in North Carolina. In 1710-1711, he began to settle in North Carolina with his new wife and her infant children, but not John and James. William Bartram was killed September 22, 1711 during a Tuscarora Indian uprising on the White Oak River. His second wife and two children were taken hostage, although later released. The Bartram family farm in Darby, first patented by his grandfather in 1683, passed to John Bartram from his uncle, Isaac Bartram, and grandmother, Elizabeth Bartram, in 1723. In April 1723, John Bartram married Mary Maris and the couple settled on the inherited 200-acre family farm in Darby. Mary

⁴¹ Craig and Yocum 1983: 267; Kenyon et al. 1975: 4, 6, map 3, map 4.

⁴² Deed, Owen Owens, Sheriff to John Bartram, September 13, 1728, Philadelphia County Records, Deed Book GWC-41-356, Philadelphia County Records, Deed Book GWC-41-356.

⁴³ *The Descendants of John Bartram, The Botanist (1699–1777)*, digital publication on CD (Philadelphia: The John Bartram Association, 2001). The town of Darby is now located in Delaware County, Pennsylvania.

⁴⁴ Francis D. West, "The Mystery of the Death of William Bartram, Father of John Bartram the Botanist," *Pennsylvania Genealogical Magazine* 20:3 (1957): 253-255; Edmund Berkeley and Dorothy Smith Berkeley, *The Life and Travels of John Bartram: From Lake Ontario to the River St. John.* (Tallahassee, FL: University Presses of Florida, 1982), 6-9.

died in 1727 and John was left a widower with two small children; his elder son Richard died soon thereafter. 45

There is as yet no real evidence to explain why John Bartram decided to purchase a new farm in 1728, but several conjectures are possible. Bartram was certainly familiar with the lands of Kingsessing and Blockley Townships in Philadelphia, which adjoined his native Darby Township in Chester County. Through his mother, he had strong connections to Kingsessing. Bartram's maternal grandparents, James Hunt and Elizah Chambers Hunt owned three tracts of land in the lower part of Kingsessing and resided there. Hartram's great-great uncle, Benjamin Chambers, owned a number of large tracts in Blockley and Kingsessing Townships, including the Lower Ferry and a 500-acre tract in Blockley that later became "The Woodlands," the estate of William Hamilton. Chambers served as executor of William Bartram's will (John's father), and may have also been John Bartram's legal guardian for a time. Bartram may have wished to establish a new home prior to a second marriage, or desired to move to an area with better potential for expansion, easier access to market in Philadelphia, or more productive soil. It is also probable that Bartram harbored the idea of founding a garden.

John Bartram's later correspondence suggests that he first planted his kitchen garden at the Kingsessing farm in 1729.⁴⁷ On December 11, 1729 at the Concord Meeting in Chester County, he married again, this time to Ann Mendenhall (1703–1789), and the new couple soon moved to the Schuylkill River farm.⁴⁸ John Bartram constructed a new stone hall-parlor house on the property on the property and auspiciously marked the work with a date stone, "IOHN*ANN:BARTRAM:1731" with the inscription "GOD SAVE" in Greek characters above. John and Ann Bartram established what came to be a dynasty of American naturalists and gardeners; four generations of the Bartram family would live and work at the Bartram botanic garden.

There is much evidence that John Bartram's interest in botany and natural history began at a young age. Pehr Kalm (1716–1779), the Swedish student of Linnaeus, visited Bartram on a number of occasions between 1748 and 1751. Kalm was taken with Bartram's "peculiar genius" for natural philosophy and natural science.

⁴⁵ Merril D. Smith, "The Bartram Women: Farm Wives, Artists, Botanists, and Entrepreneurs," *Bartram Broadside* (Winter 2001): 1; Berkeley and Berkeley, *Life and Travels of John Bartram*, 1982: 2–9.

⁴⁶ Berkeley and Berkeley, *Life and Travels of John Bartram*, 1982: 3–4, 7–8.

[&]quot;Introduced plants Troublesome in Pennsylvania Pastures and Fields," John Bartram to Peter Collinson[?] [early 1759], The Correspondence of John Bartram 1734–1777, ed. Edmund Berkeley, and Dorothy Smith Berkeley (Gainesville, FL: University Press of Florida, 1992), 453; Historical Society of Pennsylvania, Bartram Papers 1:42:4. In writing of "our Elder," Bartram noted he "had a root growing in my kitchen garden about 30 year[.] it was plowed once every year & generally grubbed & howed once or mostly twice every Summer." If Bartram's treatise on weeds was sent to Collinson in 1759, as Berkeley and Berkeley suspected, then the kitchen garden's initial planting occurred around 1729, Bartram's first summer at the Kingsessing farm.

⁴⁸ Smith, "The Bartram Women," 1; Berkeley and Berkeley, *Life and Travels of John Bartram*, 1982: 10.

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Mr. John Bartram, an Englishman, who lives in the country, about four miles from Philadelphia, has acquired a great knowledge of natural philosophy and history, and seems to be born with a peculiar genius for these sciences. In his youth he had no opportunity of going to school. But by his own diligence and indefatigable application he got, without instruction, so far in Latin, as to understand all Latin books, and even those which were filled with botanical terms. ⁴⁹

Kalm's volumes of *Travels*, published on his return to Europe are full of information on Bartram and his garden.

I have often been at a loss to think of the sources, from whence he got many things which came to his knowledge. I likewise owe him many things, for he possessed that great quality of communicating every thing he knew.⁵⁰

Michel-Guillaume Jean de Crèvecoeur (Hector St. John de Crèvecoeur) (1735–1813), the French traveler and author, visited Bartram sometime between 1765 and 1770. He fashioned a somewhat fictionalized account of his visit for *Letters from an American Farmer*, published in London in 1782. Crèvecoeur had Bartram recount the origin of his intellectual interest in botany.

'Pray, Mr. Bertram, when did you imbibe the first wish to cultivate the science of botany; were you regularly bred to it in Philadelphia?' 'I have never received any other education than barely reading and writing; this small farm was all the patrimony my father left me...I scarcely know how to trace my steps in the botanical career; they appear to me now like unto a dream; but thee mayest rely on what I shall relate, through, I know that some of our friends have laughed at it...one day I was very busy in holding my plough (for thee see'st that I am but a ploughman), and being weary, I ran under the shade of a tree to repose myself. I cast my eyes on a daisy; I plucked it mechanically and viewed it with more curiosity than common country farmers are want to do'... 'What a shame,' said my mind, or something that inspired my mind, 'that thee shouldest have

⁴⁹ Kalm's entry is dated September 25, 1748. Peter Kalm, *Travels into North America; Containing Its Natural History, and A circumstantial Account of its Plantations and Agriculture in genera*, trans. John Reinhold Forster, 2nd edition, 2 vols. (London: 1772), 88. Kalm's very important account of his travels in North America between 1748 and 1751 has had a curious publishing history in English. The original work appeared as two volumes written in Swedish: Pehr Kalm, *En Resa til Norra America* (Stockholm, 1753), with a third volume issued in 1761. This work was soon translated into German with a Leipzig edition of two volumes put forth in 1754, with a third in 1764. An English edition did not appear until 1770-1771, but as a translation of the German edition by John Reinhold Forster. The modern scholarly edition by Adolph B. Benson, *Peter Kalm's Travels in North America: The English Version of 1770*, 2 vols. (New York: Wilson-Erickson, Inc., 1937), is as the title indicates adapted from the London edition with some additions from Kalm's original Swedish version and from other manuscripts. There is still no complete English translation of Kalm's Swedish text.

⁵⁰ Kalm, Travels into North America, 89.

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employed so many years in tilling the earth and destroying so many flowers and plants without being acquainted with their structures and their uses!'51

While there is some truth in Crèvecoeur's portrayal of John Bartram as ploughman philosopher, he erred in portraying Bartram's epiphany at adulthood.

In the early-nineteenth century, William Bartram prepared several short biographies of his father for publication in Philadelphia. The first appeared in the supplement to Dobson's edition of the *Encyclopadia* (1803). William's account again stresses John Bartram's self-education from farmer to philosopher. It also emphasized the importance of John Bartram's early interest in medicine and medicinal plants.

He very early in life manifested an ardent thirst for knowledge; but the great distance from Europe, then the seat of arts and sciences, and the infant state of the colony, rendered it difficult to obtain even a moderate education...

Associating with the most respectable characters, he obtained the rudiments of the learned languages, which he studied with extraordinary application and success. So earnest was he in the pursuit of learning that he seldom sat at his meals without his book; often his victuals in one hand, and his book in the other.

He had an early inclination for the study of medicine and surgery, and acquired so much knowledge as to administer great relief to the indigent and distressed in his neighbourhood; and as most of his medicines were drawn from the vegetable kingdom, this furnished him with the opportunity for prosecuting the study of botany, which was his favourite object, together with natural history. Bred a husbandman, he cultivated the ground as the means of supporting a large family; he prosecuted his avocations as a philosopher, being attentive to the economy of nature, and observing her most minute operations. When ploughing or sowing his fields, or mowing his meadows, his inquisitive mind was exercised in the contemplation of the vegetable system, and of animated nature.⁵²

John Bartram was a prolific writer of letters and he is perhaps best understood in his own words. In 1742, he composed a brief biography of his early interest in nature:

⁵¹ Michel-Guillaume Jean de Crèvecoeur (J. Hector St. John de Crèvecoeur), "Letter XI: From Mr. Iw—n Al—z, Russian Gentleman; Describing The Visit He Paid at My Request to Mr. John Bertram, The Celebrated Pennsylvanian Botanist," *Letters from an American Farmer* (1782) (New York: Penguin Books, 1981), 194. This account of a several days' visit to the Bartram farm probably took place between 1765 and 1770. Crèvecoeur's manuscript account is dated October 2, 1769 in the French text version, and January 4, 1770 in the English; although disguised as the account of a "Russian Gentleman," the description was largely factual and probably relates to one or more real visits.

⁵² [William Bartram], "Bartram, John," *Supplement to the Encylcopædia, or Dictionary of Art, Sciences, and Miscellaneous Literature*, vol. 1 (Philadelphia, 1803), 91-92. Virtually the same text was reprinted in *The Cyclopaedia, or, Universal Dictionary of Arts, Sciences, and Literature*, vol. 4 (Philadelphia, 1807), which was then under the editorship of Alexander Wilson, William Bartram's close friend. Neither of these encyclopedia biographies credits an author, but the text is very similar to another William Bartram essay, "Some Account of the late Mr. John Bartram, of Pennsylvania," *Philadelphia Medical and Physical Journal* 1:1 (1804): 115-124.

I find by thy letter thee supposeth I was born in England but I asure thee I was born in Pensilvania & never been out of sight of land since & I believe hath taken more pains after the study of botany & the operation of nature than any other that was born in English America notwithstanding my low fortune in the world which laid me under the necessity of very hard labour for the support of my family having now a wife & seven small children whose subsitance depends on the produce that is raised on my farm which is scituate on A navigable river near Philadelphia but I have had ever since I was 12 years of age A great inclination to botany & natural history but could not make much improvement therein for want of bookes or other instruction until I entered into Correspondence with my good friend Peter Collinson.⁵³

In a similar vein, Bartram later wrote to Collinson in 1764:

I had always since 10 years ould A great inclination to plants & knowed all that I once observed by sight tho not thair proper names haveing no person or books to instruct me. 54

Throughout his life, Bartram remained proud of his intellectual accomplishments. He also realized his interests were unique among Americans. He wrote: "our Americans hath very little tast for these amusements I cant find one that will bear the fatigues to accompany me in my peregrinations." ⁵⁵

By the early 1730s, John Bartram was actively at work establishing a large garden. His farm would come to contain a collection of the known universe of North American plants-largely discovered and collected by Bartram-and significant numbers of useful, decorative, or curious European and other exotic plants from around the world. Six or seven acres of the Bartram property were set aside as a garden on the terraces sloping southeast from the house to the river. Philadelphia was in an ideal location to found a North American botanic collection. The Mid-Atlantic climate was moderate and plants from far north or far south could survive in the open ground. The city was located along the boundary between two geographic regions—the coastal plain and piedmont. Bartram's Kingsessing garden site sat squarely on this boundary, and was already host to a varied natural plant community. Within a short distance, requiring travel of only one to a few days, were diverse natural environments each with characteristic plants. Starting locally, Bartram explored the New Jersey Pine Barrens and coast, the sources of the Schuylkill River in the mountains of Pennsylvania, the three Lower Counties of Delaware, and even the eastern shore and upper Chesapeake. These "local" collecting areas became the source of much of the stock for the yearly seed business, and he and his family returned to these locations often, particularly to southern New Jersey. His successes allowed him to roam farther. Bartram was soon making extended trips to collect North American trees, shrubs, and herbaceous plants, as

⁵³ John Bartram to Alexander Catcott (Bristol, England), May 26, 1742, *Correspondence of John Bartram* 1992: 193-194.

⁵⁴ John Bartram to Peter Collinson, May 1, 1764, Correspondence of John Bartram 1992: 627.

⁵⁵ Bartram to Catcott, May 26, 1742, Correspondence of John Bartram 1992: 194.

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well as animal and mineral specimens and other curiosities. Bartram also began an extensive correspondence with European and American naturalists, and added to his botanic collections with collecting trips throughout the English colonies in North America south of Canada.

Bartram's travels were partially funded by a business in North American seeds and plants organized through his friend and chief correspondent, Peter Collinson, a London cloth merchant and avid amateur botanist and gardener. ⁵⁶ Although the two never met, they shared a close, familiar association for the rest of their lives. The surviving Bartram-Collinson correspondence begins ca. 1733, and the letters continued through Collinson's 1768 death. ⁵⁷ It is through their correspondence that the most important glimpses of John Bartram's garden are available and that much of the record of John Bartram's botanical and scientific work is preserved; only a small portion of Bartram's work was ever published during his lifetime. Collinson's own wide correspondence and numerous friendships linked a disparate group of British gardeners, nurserymen, botanists, and the owners of some of the most famous gardens of the eighteenth century. ⁵⁸ A love of gardening and a desire for new plants formed the essential connection between these men.

With Collinson as the middleman, seeds and dried specimens were sent to Philip Miller at the Chelsea Physic Garden, Johann Jakob Dillenius at Oxford, Mark Catesby and Sir Hans Sloane in London, Johan Frederik Gronovius at Leiden in the Netherlands, and Carl von Linné or Linnaeus in Sweden. Bartram also prepared specific collections, made botanic observations, and performed scientific experiments as requested by his European correspondents. ⁵⁹ Catesby, Miller, Dillenius, Gronovius, and Linnaeus were all working on describing and categorizing new

⁵⁶ For a biography of Collinson, see Norman G. Brett-James, *The Life of Peter Collinson* (London: Edgar G. Dustan & Co., 1925).

⁵⁷ Much of John Bartram's correspondence has been preserved, largely in the Bartram Papers at the Historical Society of Pennsylvania (hereafter HSP). Bartram's letters were first published in an edition by William Darlington, *Memorials of John Bartram and Humphry Marshall* (Philadelphia: Lindsay & Blakiston, 1849). Darlington's edition was heavily cut and removed some of Bartram's most controversial opinions, as well as much of the material on the business of plant exchange with Europe. A more complete text is now available in *The Correspondence of John Bartram 1734-1777*, ed. Edmund Berkeley, and Dorothy Smith Berkeley (Gainesville, FL: University Press of Florida, 1992).

⁵⁸ A small selection of Collinson's vast correspondence has recently been published in: 'Forget not Mee & My Garden...' Selected Letters 1725–1758 of Peter Collinson, F.R.S., Memoirs of the American Philosophical Society, vol. 241, ed. Alan W. Armstrong (Philadelphia: American Philosophical Society, 2002).

Few of the botanic and natural history specimens collected by John Bartram survive or can be identified today. A small number are now in the Sloane Herbarium at the Natural History Museum, London, and some have been identified in the collections of the Oxford Botanic Garden. The only large collection of herbarium specimens prepared by John Bartram is preserved in three volumes (vols. XI, XII, and XIII) of Lord Petre's *Hortus Siccus*, now at the Sutro Library, San Francisco, California. See Elizabeth P. McLean, "A Preliminary Report on the 18th Century Herbarium of Robert James, Eighth Baron Petre," *Bartonia* 50 (1984): 36–39; William R. Buck and Elizabeth P. McLean, "Mosses' in Lord Petre's Herbarium Collected by John Bartram," *Bartonia* 51 (1985): 17–33; and Alfred E. Schuyler and Ann Newbold, "Vascular Plants in Lord Petre's Herbarium Collected by John Bartram," *Bartonia* 53 (1987): 41–43.

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plants from North America and elsewhere around the globe. During Bartram's life, European scientists were in the process of codifying a new system of scientific botany, largely based on the work of Linnaeus. Bartram was able to provide hard evidence on the plants of North America, and his contributions were mentioned by all these authors. He also received publications from Collinson and his friends in the natural science community, which formed the basis of a valuable reference library at the Bartram garden.

Peter Collinson's connections with the British gardening world led to lucrative commissions for Bartram and his family for North American seeds. The initial scheme, beginning in the mid-1730s, included a select few from the landscape garden movement in England: Robert James, eighth Baron, Lord Petre, at Thorndon Hall in Essex; his cousin, Edward Howard, ninth Duke of Norfolk, at Worksop Manor; and Charles Lennox, second Duke of Richmond, at Goodwood. They were joined in a short time by a register of the owners of important British gardens—John Russell, fourth Duke of Bedford, at Woburn; Archibald Campbell, third Duke of Argyll, at Whitton; John Stuart, third Earl of Bute; Norborne Berkeley, Lord Botetourt at Stoke Park; the ninth Earl of Lincoln at Oatlands Park; Charles Hamilton at Painshill Park; Dr. John Fothergill, and many others. 60

Bartram's varied customer list is recorded in part in a Collinson manuscript, "An Account of the Introduction of American Seeds into Great Britain." Collinson compiled a list of subscribers for seeds between 1740 and 1767. The manuscript also includes a numbered catalogue list of 104 American species, the "List of Seeds contained in Each Box." Early on in the exchange, Collinson standardized the subscriptions for Bartram's seeds at five guineas per box. The boxes contained seeds in great variety, generally trees and shrubs, and 100 or 105 species seems to have been the goal. Professional nurserymen in London also ordered heavily.

⁶⁰ Joel T. Fry, "An International Catalogue of North American Trees and Shrubs: The Bartram Broadside, 1783," *The Journal of Garden History* 16 (Jan.-Mar. 1996): 3–9. For details on Bartram's early clients and the impact of North American plants on English gardens, see Mark Laird, *The Flowering of the Landscape Garden: English Pleasure Grounds* 1720–1800 (Philadelphia: University of Pennsylvania Press, 1999), especially chapter 2, "The North American Influx: A Mania for Pines and Magnolias," 63–98; and Douglas D. C. Chambers, *Planters of the English Landscape Garden: Botany, Trees, and the Georgics* (New Haven: Yale University Press, 1993), chapters 6 and 7.

⁶¹ Peter Collinson, "An Account of the Introduction of American Seeds into Great Britain," contributed by A. B. Rendle, *The Journal of Botany British & Foreign* 63 (1925): 163–165. The original Collinson manuscript, entitled "Account" and dated December 16, 1766, is located at the Botany Library, Natural History Museum, London, with a duplicate at the Linnean Society, London. Berkeley and Berkeley, *Life and Travels of John Bartram*, 1982: appendix 6, 311–318, augment Collinson's list with customers documented in the Bartram correspondence. They provide dates for the first year a customer was mentioned, but give no idea as to how many boxes each customer ordered or how long they remained subscribers.

⁶² Mark Laird observed: "it seems reasonable to assume that 105 different types were the standard package, for this correlates with the price of five guineas, or 1s. per type." Laird, *The Flowering of the English Landscape Garden*, 78 and 397, note 81. It has sometimes been assumed that Collinson's "List of Seeds" reflects the contents of Bartram's boxes from every year of his more than twenty-five in the seed business; rather, this list is more likely the catalogue of seeds for one year, probably 1765 or 1766.

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Bartram traveled through the Virginia tidewater and piedmont to the Blue Ridge in the autumn of 1738, and planned his first visit to New York for the autumn of 1739, although he may not have gotten there until 1741. In his early exploration, Bartram was aided by his membership in the Society of Friends. The Quakers had a strong tradition of itinerant Friends who traveled the network from meeting to meeting to speak and carry news. Bartram's travels often followed along a route of Quaker meetings where he could expect food and shelter. Bartram's subscribers were apparently disappointed with his extended trip through Virginia in 1738. Collinson dissuaded Bartram from another long and expensive trip to New England in 1739, writing: "we think this year thee had better rest from thy labours, for I find Travelling Furnishes little but Herbaceous Seeds & Specimens[.] what thy Employers most want are shrubs & Trees."

From 1739 onward, Bartram concentrated on providing what his European clients most wanted, boxes of seeds of North American trees and shrubs. Bartram continued to collect herbaceous seeds and plants for his own garden, and yearly collections were sent for Collinson who distributed surplus as he saw fit. From the beginning of their friendship, Bartram made up special boxes of live plants and roots from his latest discoveries—rarities and curiosities for Collinson alone. These plants quickly made Collinson's garden famous. Plants from Bartram were drawn by George Ehret and Mark Catesby. Published descriptions of these new North American species appeared in Catesby and Philip Miller, generally crediting Collinson. Catesby's Natural History (1731–1748) illustrated a number of Bartram's plants as introductions to Collinson's garden, and a few from specimens inducing: Pink Lady's Slipper, Cypripedium acaule; Skunk Cabbage, Symplocarpus foetidus; Pawpaw, Asimina triloba; Great Laurel or Rosebay, Rhododendron maximum; Sheep Laurel, Kalmia angustifolia; Wood Lily, Lilium philadelphicum; Canada Lily, Lilium canadense; Ginseng, Panax quinquefolium; and Shooting Star, Dodecatheon meadia. 65

Professional nurserymen around London became important clients for Bartram's seeds, often in larger quantities than what was sent to private customers. Through Collinson, seeds went to James Gordon, Christopher Gray, Nathaniel Powell, John Swinhoe, John Bush, John Williamson, John Webb, and others. In 1739, Collinson sent Bartram a copy of Christopher Gray's London catalogue of American plants, which included the first published illustration of the great or

Edmund and Dorothy Berkeley offer a list of John Bartram's customers based on two sources: a Collinson manuscript, entitled "Introduction of American Seeds into Great Britain," lodged at the Natural History Museum in London, and Bartram's own correspondence. Berkeley and Berkeley, *Life and Travels of John Bartram*, 1982, appendix 6, 311–318. Many of Bartram's introductions to horticulture can be identified from Collinson's own catalogue of his garden, *Hortus Collinsonianus: An Account of the Plants Cultivated by the Late Peter Collinson, Esq., F.R.S*, ed. L. W. Dillwyn (Swansea: W. C. Murray and E. Rees, 1843).

⁶⁴ Peter Collinson to John Bartram, April 12, 1739, Correspondence of John Bartram 1992: 117.

⁶⁵ Mark Catesby, *Natural History of Carolina*, *Florida and the Bahama Islands*, 2 vols. and appendix (London, 1731–1748).

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Southern Magnolia, *Magnolia grandiflora*. ⁶⁶ Gray's list, published in 1737, records North American plants that were already known and in cultivation in England at the beginning of the Bartram-Collinson exchange.

In America, Bartram became part of a circle of enlightenment intellectuals including among others: James Logan, Cadwallader Colden, John Mitchell, William Byrd, John Clayton, Jared Eliot, and Benjamin Franklin. An American scientific society on the model of the Royal Society and other European institutions was Bartram's original idea, and Bartram and Franklin together founded the American Philosophical Society in Philadelphia in 1743. Franklin remained an intimate friend to the Bartram family and continued to look after their interests during his long sojourns in Europe.

John Bartram soon gained a reputation as a self-taught expert on the flora of eastern North America. By the end of his career he had traveled widely throughout Pennsylvania and New Jersey, collecting in the Susquehanna Valley; the Pennsylvania Mountains, the Delaware Water Gap, and as far west as Pittsburgh and the Ohio River. Bartram traveled through Delaware and the Eastern Shore of Maryland; through the Virginia Tidewater, Piedmont and Blue Ridge; in New York up the Hudson River Valley to Albany and the Catskills; and to Connecticut; Rhode Island; North Carolina; South Carolina; Georgia; and Florida. The journals of his trip from Pennsylvania to Onondaga in 1743, and of his investigations in Florida from St. Augustine to the source of the St. John's River in 1765–1766, were published in his own lifetime. Eventually through efforts of Collinson and also Franklin in London, John Bartram was awarded a yearly stipend of £50 from the King of England, George the III, from 1765 to his death. Bartram was often styled "King's Botanist" in his later years.

⁶⁶ Peter Collinson to John Bartram, February 7, 1739, Correspondence of John Bartram 1992: 111.

⁶⁷ Francis D. West, "John Bartram and the American Philosophical Society," *Pennsylvania History* 23 (Oct. 1956): 463–466; Whitfield J. Bell, Jr., *Patriot-Improvers: Biographical Sketches of Members of the American Philosophical Society*, vol. 1 (1743–1768), in *Memoirs of the American Philosophical Society*, vol. 226 (Philadelphia: American Philosophical Society, 1997): 48–49.

⁶⁸ John Bartram, Observations on the Inhabitants, Climate, Soil, Rivers, Productions, Animals, and other Matters Worthy of Notice. Made by Mr. John Bartram, in his travels from Pensilvania to Onondago, Oswego and the Lake Ontario, in Canada (London, 1751); An Account of East-Florida, with a journal, kept by John Bartram of Philadelphia, Botanist to His Majesty for the Floridas; upon a journey from St. Augustine up the River St. John's, ed. William Stork, 2nd ed. (London, 1767); 3rd ed. (London, 1769); 4th ed. (London, 1774).

⁶⁹ Berkeley and Berkeley, *Life and Travels of John Bartram*, 1982: 226–228; Fry, "An International Catalogue," 1996: 6. There remains some question on John Bartram's royal title. Bartram's title appears variously as "King's Botanist," "His Majesty's Botanist for North America," "Botanist to his Majesty for the Floridas," "American botanist to his Britannic Majesty George the Third," among others; however, in actuality his position seems to have been more in the nature of a pension or an annuity than a title. It was probably awarded in part on political grounds in order to appease Benjamin Franklin, as well as a response to William Young, Jr.'s appointment as "Queen's Botanist; William Young Sr. was a strong supporter of the Penn family and the proprietary party. In May 1765, Collinson wrote that Bartram was appointed "Kings Botanist," but later reflected on September 19, 1765: "but under what Character the King is pleased to rank thee, I do not know only this I know He allows thee £50 per annum."

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In 1760, his travels first took him to North and South Carolina. This provided him with a number of southern plants, many marginally hardy in the open ground in Philadelphia. Bartram learned through trial how to protect these tender plants from the frosts of Pennsylvania. Periodic importations from gardening friends in Charleston, and from his half-brother Colonel William Bartram (1711–1770) who had settled on the Cape Fear River in North Carolina, replaced plants killed by severe winters. Some eventually required the shelter of a greenhouse. The diverse collection of southern plants remained an important feature of the Bartram garden throughout its active history.

Bartram's trips served as a natural school of botany. John Bartram and his family developed a deep knowledge of North American plants and plant communities from direct observation of the natural environment, and from long years of practical effort in the garden. Bartram's wife, Ann, maintained the garden when her husband was away. As his sons matured, they accompanied him on collecting trips. The family passion for plants affected the future paths of most of the Bartram children. Moses and Isaac Bartram became apothecaries in Philadelphia, James and Benjamin became farmers, and William and John followed their father's career and continued the family botanic garden and nursery. William Bartram became a naturalist-explorer, author, and artist of renown in his own right.

While John Bartram and others frequently emphasized his "low fortune in the world," in reality by colonial standards he had inherited significant property to begin his life as a farmer. Bartram proved quite successful at farming and he continued adding property to his original 102-acre purchase in Kingsessing. On September 4, 1735 he purchased a second farm tract of a little over 142 acres from Andrew Jonason, son of Nils Jonasson who had acquired the land from Peter Yocum in 1681. This new farm was just north of Bartram's home property, and within the bounds of the historic Aronameck plantation. The farm bordered on the Lower Ferry property and spanned the Darby Road (present Woodland Avenue). The river frontage of this new tract was occupied by John Bartram's son, James Bartram after 1753. John Bartram probably oversaw the construction of a new stone house on the farm around this date. None of this tract is preserved in the current park at Bartram's Garden.

Bartram continued to add land to his holdings in Kingsessing. In April 1738, he mortgaged his original 102-acre farm for £80 through the General Loan Office on a sixteen-year term. ⁷² This

⁷⁰ Philadelphia County Records, Deed Book D-70-444; Kenyon et al. 1975: 6, Map 4.

^{71 &}quot;Indenture...John and Ann Bartram and Son James Bartram, August 7, 1753," recorded on September 1, 1753 and signed B. Franklin, Justice of the Peace. Deed for sixty-four acres of riverfront land along the Schuylkill river on the second Bartram farm to the garden's north. Collection of Mr. and Mrs. Stuart Karu, exhibited January through May 1990, Arthur Ross Gallery, University of Pennsylvania, Philadelphia, Pennsylvania. Dilys Pegler Winegrad, *The Intellectual World of Benjamin Franklin: An American Encyclopaedist at the University of Pennsylvania* (Philadelphia: University of Pennsylvania, 1990), 64.

⁷² Philadelphia City Archives, General Loan Office Register Book 1736–1738, 194; James M. Duffin, *Guide to the Mortgages of the General Loan Office of the Province of Pennsylvania, 1724–1754* (Philadelphia: Genealogical Society of Pennsylvania for the Philadelphia Area Consortium of Hereditary and Genealogical Societies, 1995).

may have been in preparation for the purchase of additional land. On April 3, 1739, John Bartram purchased fifty acres of land to the south of his original farm from the heirs of Andrew Souplis, along with ten acres of marsh. This was the same tract of Aronameck land Souplis bought from Peter Yocum in 1697. Bartram re-sold a little over twelve acres of this tract plus several isolated pieces of marsh to his neighbor to the south, Nathan Gibson, on March 17, 1740, while the remaining thirty-seven plus acres were added to the Bartram farm. This moved the south boundary of Bartram's farm to creek, running roughly along the line of modern 56th Street. Through these transactions, Bartram added both valuable marshy flats along the river and upland extending west almost to the Darby Road. The southern meadow ground of the current park lies on this land bought from Andrew Souplis. At this stage, the Bartram's property in Kingsessing reached its largest extent, 287 acres and fifty perches with some additional outlying marsh tracts.

John Bartram is primarily noted today as a pioneering botanist, but he was also known at the time as a skilled farmer and gardener. Crèvecoeur has left the best description of Bartram's farm and garden following a visit in the late 1760s. Crèvecoeur described a well-ordered, productive farm: "every disposition of the fields, fences, and trees, seemed to bear the marks of perfect order and regularity, which in rural affairs, always indicate a prosperous industry." Crèvecoeur made note of a number of innovative farming techniques, including the use of red clover, fertilizing fields with composted marsh mud, and marsh lands reclaimed as productive wet meadows by the cooperative effort of farmers in Kingsessing. He explained:

The whole store of Nature's kind luxuriance seemed to have been exhausted on these beautiful meadows; he made me count the amazing number of cattle and horses now feeding on solid bottoms, which but a few years ago had been covered with water...he next showed me his orchard, formerly planted on a barren sandy soil, but long since converted into one of the richest spots in that vicinage. ⁷⁸

Crèvecoeur recorded crops of wheat at twenty-eight to thirty-six bushels to the acre and flax, oats, and Indian corn in the same proportion, the result of intensive care for the fields.⁷⁹

⁷³ Philadelphia County Records, Deed Book H–2–252.

⁷⁴ Philadelphia County Records, Deed Book H–2–257.

⁷⁵ On nineteenth-century maps this creek was sometimes labeled "Botanic Creek." There is no record of its name during John Bartram's tenure at the garden.

⁷⁶ Kenyon et al. 1975: 6–7, map 4.

⁷⁷ Crèvecoeur 1782: 188.

⁷⁸ Crèvecoeur 1782: 192.

⁷⁹ Crèvecoeur 1782: 193.

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As Bartram traveled across the colonies of eastern North America he observed farming practices and frequently commented on the good and the bad. He wrote Collinson after his first trip through Maryland and Virginia in 1738:

there is little in the lower parts but ould worn out fields without fences—naked fields of indian corn & tobaco which impoverishes the land[,] miserable poor houses ready to tumble down & the countrey in general short of grass of sufficient food for Cattle. ⁸⁰

Bartram corresponded with Jared Eliot (1685–1763), a Presbyterian minister from Connecticut whose *Essays upon Field Husbandry in New England*, published between 1748 and 1759, were some of the earliest writings on agricultural reform and scientific farming practices to appear in North America. ⁸¹ The letters to Eliot indicate Bartram was familiar with the writings of Jethro Tull (1674–1741) and Robert Maxwell (1695–1750), English agricultural reformers who advocated repeated deep plowing on cultivated fields; Bartram discounted the usefulness of this practice in North America. Bartram also wrote Eliot with advice on draining salt marshes, about his own practice of composting marsh mud to spread on upland fields as a fertilizer, about hedging and ditching fields and with a summary of soil types and agricultural yield in the parts of the Middle and Southern Colonies where he had traveled. ⁸²

John Bartram's correspondence contains major essays on agricultural subjects including "Introduced Plants Troublesome in Pennsylvania Pastures and Fields" which describes plants disliked by or dangerous to cattle, horses, and sheep; and a description of winter pasturage available in the colonies. ⁸³ Bartram contributed an essay on the red cedar or *Juniperus virginiana* for Benjamin Franklin's 1749 almanac, *Poor Richard Improved*. ⁸⁴ He described multiple economic uses for this tree on farms in the middle colonies and advocated its use for fencing and hedging fields. In an aside, Bartram's essay includes the following detail of his own farm:

when you have got a few bearing trees, the birds will carry the berries all over your plantation, which will come up and grow finely, so that you

⁸⁰ John Bartram to Peter Collinson, July 18, [1739], Correspondence of John Bartram 1992: 121.

⁸¹ Jared Eliot, *Essays Upon Field Husbandry in New England and Other Papers, 1748–1762*, ed. Harry J. Carman and Rexford G. Tugwell (New York: 1934, reprinted 1967).

⁸² Correspondence of John Bartram 1992: 320–323, 336–338, 342, 401–402, 415–416, 576–578.

⁸³ John Bartram to Peter Collinson[?], [1759], *Correspondence of John Bartram* 1992: 451–454; John Bartram to Peter Templeman, July 6, 1761, *Correspondence of John Bartram* 1992: 524–528.

⁸⁴ John Bartram, "An Essay for the improvement of estates, by raising a durable timber for fencing, and other uses," *Poor Richard Improved*, (Philadelphia, 1749), *Correspondence of John Bartram* 1992: 294–297.

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may dig up as many as you please to plant...I have a tree in an old field, which hath stood about eighteen years, that would now make seven good posts.⁸⁵

His comment suggests there were old or exhausted fields on his farm that had not been cleared or plowed for eighteen years, close to the time of his purchase. 86

As a farmer Bartram followed the mixed and largely self-sufficient agriculture common to the middle colonies. The few references available indicate he grew grains—wheat, oats, rye, and maize, raised livestock—including horses, dairy cows, pigs, and sheep, and maintained a large orchard and kitchen garden. In the autumn of 1761 the Bartram family received the present of a milk cow from Sir John St. Clair (d. 1767) who served as Quarter-Master General for the British troops in America from 1755 to 1767, and as an active gardener exchanged a number of plants with John Bartram from his estate, "Belleville," in northern New Jersey. ⁸⁷ St. Clair notified Bartram of this gift in 1761:

If you will send any Body to this place to bring a cow for Mrs. Bartram she will oblige me in accepting of her. She is of the famous Rhode Island breed and will calve at Christmas; they are of a very large Size; if her Calf is not a Bull I shall rear one of mine for you that you may preserve that valuable breed which cost me a deal of trouble to get.⁸⁸

As this gift was especially directed to Ann Bartram it is likely that much of the dairying activity at the Bartram farm was in the hands of the female members of the family as was common in the eighteenth and nineteenth centuries. The 1769 Proprietary Tax records indicate three horses, sixteen cattle, and ten sheep on the Bartram farm. In 1774, the senior John Bartram reserved one horse and one cow for his use, while his son John Bartram, Jr. was taxed for two horses and eight cows.⁸⁹

While John Bartram's life stands well delineated in the historic record, an image of his garden remains much less focused. Descriptions of the garden during his lifetime are rare, and historic images of the garden from the Bartram period are almost unknown. In 1761, John Bartram

⁸⁵John Bartram, ["Essay on the red cedar, *Juniperus virginiana*"], in Benjamin Franklin, *Poor Richard Improved* (Philadelphia, 1749).

⁸⁶ Bartram may have been the first, or one of the first, to bring red cedar trees to Kingsessing from their natural range on the coastal plain.

⁸⁷ Charles R. Hildeburn, "Sir John St. Clair, Baronet, Quarter-Master General in America, 1755 to 1767," *Pennsylvania Magazine of History and Biography* 9:1 (1885): 1–15.

⁸⁸ Sir John St. Clair to John Bartram, November 4, 1761, Correspondence of John Bartram 1992: 540.

⁸⁹ "Proprietary Tax, County of Philadelphia, 1769," *Pennsylvania Archives*, 3rd series 14 (1897): 97-98, and "Provincial Tax, County of Philadelphia, 1774," *Pennsylvania Archives*, 3rd series 14 (1897): 353-354.

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wrote his long-time friend Peter Collinson: "I can challenge any garden in America for variety." After three decades traveling the wilderness of eastern North America, and trading native and exotic plant stock with fellow cultivators in Europe and nearly every colony, he had amassed a truly comprehensive garden. Bartram's all-encompassing aesthetic was clear, writing ca. 1740: "whatsoever whether great or small ugly or handsom sweet or stinking... every thing in the universe in thair own nature apears beautifull to mee."

But even Bartram himself rarely provided much detail about his own garden. There are occasional descriptions by visitors. Kalm sketched a very brief description of Bartram's garden during his early visits there in 1748, observing:

He has, in several successive years, made frequent excursions into different distant parts of North America, with an intention of gathering all sorts of plants which are scarce and little known. Those which he found he has planted in his own botanical garden, and likewise sent over their seeds or fresh roots to England. We owe to him the knowledge of many scarce plants, which he first found, and which were never known before. He has shewn great judgment, and an attention which lets nothing escape unnoticed. Yet with all these great qualities, he is to be blamed for his negligence, for he did not care to write down his numerous and useful observations.

This does not reveal much about John Bartram's garden except that it was a "botanical garden," and contained a collection of scarce or largely unknown plants. But Kalm was a trained European observer, fresh from study at the university garden at Uppsala, Sweden. His simple acceptance of this as a botanic garden suggests it fit the European criteria for a scientific garden. 92

In the autumn of 1754, Alexander Garden (1730–1791), a Scottish physician who had settled in Charleston, South Carolina, passed through Philadelphia and visited Bartram at his Kingsessing farm. Dr. Garden met John Bartram and his son William earlier that summer at "Coldengham," the country house of Cadwallader Colden on the Hudson River in New York. Writing to Colden after his second encounter with Bartram, Garden provides an important account of Bartram and his garden:

I have met with very Little new in the Botanic way unless Your acquaintance Bartram, who is what he is & whose acquaintance alone makes amends for other dissapointments in that way...One day he Dragged me out of town & Entertain'd me so agreably with some Elevated Botanicall thoughts, on oaks, Firns, Rocks &c that I forgot I was hungry till we Landed in his house about four Miles from

⁹⁰ John Bartram to Peter Collinson, July 19, 1761, *Correspondence of John Bartram* 1992: 529. It is possible that this quote's context refers to a variety of carnations, not to the entire collection of garden plants.

⁹¹ John Bartram to J. Slingsby Cressy, [March or April 1740?], *Correspondence of John Bartram* 1992: 131.

⁹² Kalm, *Travels*, vol. 1: 88-89.

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Town, There was no parting with him for two Days, During which time I breakfasted, Dined & Supped Sleep't & was regaled on Botany & Minerology, in which he has some excellent Notions & grand thoughts. His garden is a perfect portraiture of himself, here you meet wt. a row of rare plants almost covered over wt. weeds, here with a Beautiful Shrub, even Luxuriant Amongst Briars, and in another corner an Elegant & Lofty tree lost in common thicket—on our way from town to his house he carried me to severall rocks & Dens where he shewed me some of his rare plants, which he had brought from the Mountains &c. In a word he disdains to have a garden less than Pensylvania & Every den is an Arbour, Every run of water, a Canal, & every small level Spot a Parterre, where he nurses up some of his Idol Flowers & cultivates his darling production.

Garden was clearly overwhelmed with the force of John Bartram's personality, and with the "rare plants" and "weeds" under cultivation in the garden. His description has often been taken at face value—suggesting John Bartram was a lackadaisical gardener with a messy, untended garden. In reality, this account implies a naturalistic garden aesthetic, which might have been more typical of the wild gardens of the late nineteenth century than the formal landscapes of the mid-eighteenth century. The image of John Bartram nursing up his "Idol Flowers &…darling productions" is probably closest to a true picture, and suggests the intensity of his garden. 94

For details of his own garden practices, we are left to John Bartram's substantial correspondence. Bartram could be eloquent in his descriptions of natural beauty. He wrote Collinson in 1746 describing the Shenandoah Valley, one of his favorite collecting sites:

I have gathered the finest of my autumnal flowers & where by report of the inhabitants it is like as if Flora sported here in solitary retirement as Sylva doth on the kats kill mountains where there is the greatest variety of uncommon trees & shrubs that I ever saw in such A compass of ground. ⁹⁵

John Bartram was equally eloquent about the plants he found desirable in his own garden. They were "curious" or "most curious," "strange," "monstrous," "comical," "prodigious," "gigantick," "glorious," "grand," "showy," "pretty," "lovely," "fine," "neat," or "rare." "A fine acquisition" was both "hardy" and added "variety" to his garden. Undesirable plants were "contemptible," "odious," "debased," "common," or "ordinary," and "stubborn" to cultivate.

Bartram had the collector's compulsion for variety. To Philip Miller he wrote, "one or two is enough for me," and again, "two roots of a sort is enough...I dont want much of any one

⁹³ Alexander Garden to Cadwallader Colden, November 4, 1754, *The Letters and Papers of Cadwallader Colden*, vol. 4 (New York: Ams Press, 1973), 471–472, originally printed in *Collections of the New-York Historical Society for the Year 1920*.

⁹⁴ Ibid.

⁹⁵ John Bartram to Peter Collinson April 16, 1746, Correspondence of John Bartram 1992: 274.

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species but variety pleaseth me." After the creation of his "New Flower Garden" in 1758, he solicited plants from his European friends:

at present my fancy runs all upon the living curious seeds cuttings or bulbous roots[.] fibrous roots is difficult to send...for now every few nights I dream of seeing & gathering the finest flowers & roots to plant in my garden[.] pray my dear friend oblige me with one or two of thy best sorts[,] I want but one of A sort but I love variety[.] pray dont let our dutch outdo me. ⁹⁷

As well as variety, Bartram the collector also valued the unique prize, stating in 1760:

I am exceedingly pleased with the laurel berries espetialy the Portugal If but one of each will grow well I would not take ten guineas A piece for them (as poor as I am) I believe there is not one growing in our 4 or 5 governments. 98

Writing Collinson in 1763, Bartram boasted: "thy Italian strawberry is now in blossom & ripe fruite & the pineapple grows finely these I am proud of as I think I am the onely Proprietor of them in the country." "99

Bartram voiced a dislike for plants that were not hardy in his Pennsylvania garden, but he eventually gave in to the compulsion for year round gardening and built a greenhouse. He explained in 1757: "I dont greatly like tender plants what wont bear our severe winters but perhaps annual plants that would perfect thair seed with you without the help of A hot bed in the spring will do with us in the open ground." ¹⁰⁰

In the 1730s and 1740s, Bartram echoed the prevailing taste for geometric forms, clipped trees and shrubs—evidence for the controlling hand of man in the garden, explaining in 1738: "white pine is more ornamental growing as straight as an arrow & a fine pirmidel form." In a rare letter describing the function of plants in the garden landscape, Bartram wrote a New York acquaintance ca. 1740:

as to the evergreens for pyramids that which is called in Europe the silver fir in new England hemlock & our people spruice is esteemed one of the most beautifull evergreens for showey pyramids & yew & holy is also much

John Bartram to Philip Miller, June 20, 1757, Correspondence of John Bartram 1992: 423-424.

⁹⁷ John Bartram to Philip Miller, February 18, [1759], *Correspondence of John Bartram* 1992: 456-458.

⁹⁸ John Bartram to Peter Collinson, February 20, 1760, Correspondence of John Bartram 1992: 480-481.

⁹⁹ John Bartram to Peter Collinson, August 8, 1763, Correspondence of John Bartram 1992: 603-606.

¹⁰⁰ John Bartram to Philip Miller, June 20, 1757, Correspondence of John Bartram 1992: 423-424.

¹⁰¹ John Bartram to J. J. Dillenius, August 1, 1738, Correspondence of John Bartram 1992: 97.

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esteemed...for hedges in A garden I like our red cedar or Juniper for tall natural pyramids the white or Lord weymouth pine & balm of gilead fir the larix & spruce fir & arbor vita. 102

There is abundant evidence for the use of hedges and live fencing on the Bartram farm and garden through several generations. Bartram dated his first experiments with cedar hedging to ca. 1737: "about 16 years past I planted A hedge of red Cedars one foot long on a small bank About 2 foot asunder[.] thay growed so well that in 3 or 4 years I had A fine hedge 4 foot high 2 foot thick, & so close that A bird could not fly thro it." 103

Bartram's letters also provides hints to his skill as a plantsman, and give evidence of soil preparation and tillage; experiments in soil, situation, and exposure; plant propagation, grafting, and even hybridization. His correspondence with Philip Miller in particular tends to provide details of his gardening technique, elucidating in 1758:

the mould...I spread carefully on A bed & out of it come up abundance of gramcils several thisles vervains & several others that is so small yet that I cant know them which shows that the plants whose seed will rarely come up when sent in paper will readily come up when sent in earth[.] I took so much care not to break the roots or buds that I took the box to pieces & spread the earth carefully on A bed that the labels might not be broke from the roots...I believe all cuttings should be stuck onely half way in the earth but what can live (except bulbous roots) in close hot stowage. 104

Corresponding with his son William in 1761, John repeated his experience with native plants: "fall is the best time to sow the native seeds...spring may do but many miss comeing up that year." ¹⁰⁵

Bartram's descriptions of other gardens are also useful in understanding his own garden. Early in their correspondence, following Bartram's autumn 1738 visit through Maryland and Virginia, he wrote Collinson:

thair gardens is poorly furnished with Curiosities[.] John Clatons & Col Byrds is the best furnished with A variety of plants but falls short of our in pensilvania which is supplied from England france Holland & Germany[.] Col Byrd is very prodigal in Gates roads walks hedges & seeders trimed finely & A little green house with 2 or 3 [orange] trees with the fruit on but I saw very few that had a good notion of either good husbandry or house wifery...I saw in friend Custices

¹⁰² John Bartram to Peter Bayard, [Fall 1741 (or 1740?)], Correspondence of John Bartram 1992: 174-175.

¹⁰³ John Bartram to Jared Eliot, February 12, 1753, *Correspondence of John Bartram* 1992: 342. An essay by Bartram on the advantages of eastern red cedar for fencing and hedging appeared in Benjamin Franklin's *Poor Richard Improved* (1749), *Correspondence of John Bartram* 1992: 294-297.

¹⁰⁴ John Bartram to Philip Miller, June 16, 1758, Correspondence of John Bartram 1992: 435-436.

¹⁰⁵ John Bartram to William Bartram, December 27, 1761, Correspondence of John Bartram 1992: 543.

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garden some fine yew trees & two little hors chestnuts & a statice which was new to me. 106

Bartram could also be disparaging of his chief competitors in the Philadelphia area, including Dr. Christopher Witt (1675–1765), who had a slightly older botanic collection in Germantown:

I have lately been to visit our friend Doctor wit where I spent 4 or 5 hours very agreeable sometimes in his garden where I viewed every kind of plant I believe that grew therin...I observed particularly the Doctors famous Lychnis which thee hath dignified so highly, is I think unworthy of that Character our swamps & low grounds is full of them[.] I had so contemptible an opinion of it as not to think it worth sending nor afford it room in my garden. ¹⁰⁷

Identifying the multiplicity of plants in John Bartram's garden is a major undertaking. The large plant lists that survive from John Bartram's time are almost solely woody trees and shrubs, the North American plants that were the foundation of his business. Some idea of the plants and particularly the herbaceous plants that formed the bulk of his garden can be gathered from Bartram's exchanges with fellow gardeners, particularly Collinson. Herbaceous seeds for exchange were more likely gathered from plants actually growing in Bartram's garden, although John Bartram continued to gather large quantities of new seeds on all his trips, and these too were also divided with selected friends. Plants, cuttings, and roots from Bartram's garden were also exchanged, and much of the surviving Bartram correspondence details requests for plant species, and the success, and often repeated failures, of shipments.

Throughout this correspondence, John Bartram's own letters are for the most part preserved as summaries or fragmentary drafts from his letterbook. Many more letters to Bartram are preserved, and letters from some years are more completely preserved than others, so the record is far from complete. The documents record desired plants, difficult plants, curious plants, and failed shipments—an incomplete sample of what was actually in the garden. This requires some leaps of inference to reconstruct the plant collection in his garden. Clearly, as in any garden, Bartram's collection of plants varied widely from year to year. Plants came and went according to the weather and the year, plants once grown successfully were lost to cultivation, and a number of common plants were more than likely not mentioned at all.

Most of John Bartram's earliest letters are not preserved at all, so it is impossible to know fully what his earliest requests were. In late winter 1736, Peter Collinson sent an assortment of seeds from Philip Miller, explaining:

I have procured from my knowing Friend Philip Miller gardener to the Physick Garden att Chelsea belonging to the Company of Apothecarys 69 sorts of Curious seeds and some other of my own Collecting—this I hope will Convince thee I do what I can and if I lived as thou does always in the Country I should do More But

¹⁰⁶ John Bartram to Peter Collinson, July 18, [1739], Correspondence of John Bartram 1992: 121-122.

¹⁰⁷ John Bartram to Peter Collinson, June 11, 1743, Correspondence of John Bartram 1992: 215-216.

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in my situation it is Impossible. Besides most of the plants thee writes for are not to be found in gardens but growing Spontaneously Many Miles off and a Many Miles from one another. 108

Collinson's comments indicate Bartram's requests were not common English garden plants—many were likely medicinal plants that Bartram encountered in European herbal and medical books, and it appears that Bartram was already planning an all-encompassing botanic garden. This letter also highlights a difference in character between Collinson and Bartram—Collinson was not about to go traveling for the plants Bartram requested.

In 1742, Bartram put together a collection of "about 50 different sorts of seeds of our finest wild flowers gathered in their best state of ripeness & well dried" for a correspondent in Europe. ¹⁰⁹ When Collinson sent a collection of kitchen garden seeds from a friend in 1744, Bartram replied unimpressed:

I am heartily obliged to thy friend the gardener for his kind endeavours yet am sorry he sent me such large quantity of seeds that might have fetched him something considerable in London which to me signified very little for we have great plenty of such things in almost every kitchen garden[.] I sowed A little of most sorts but what I gave to our proprietors gardener but I see nothing come up [but] what we have very common. 110

Bartram's comments suggest the widespread cultivation of most common European garden plants in Philadelphia. This letter also hints at John Bartram's local exchanges within the local gardening community—something that was probably frequent, but is now largely undocumented. Bartram traded seeds and plants with James Alexander and Dr. Christopher Witt in Germantown, and presumably with most of the other well-known gardens in the city, of Logan, Norris, Pemberton, Shippen, and others. As the major continental port, Philadelphia enjoyed international trading opportunities unavailable to most other colonials. The varied ethnic population of the city also brought a wealth of plants to the Philadelphia market.

Bartram also traded plants through most of the English colonies in North America. Plant material went back and forth to John Clayton in Virginia; Cadwallader Colden in New York; Governor Lewis Morris and John St. Clair in New Jersey; Jared Eliot in Connecticut; William Powell and Governor Arthur Dobbs of North Carolina; Alexander Garden, Martha Logan, Thomas Lamboll, and Sarah Hopton in South Carolina; and even to I. Slingsby Cressy of

¹⁰⁸ Peter Collinson to John Bartram, February 20, 1736, Correspondence of John Bartram 1992: 21-23.

¹⁰⁹ John Bartram to Peter Collinson, July 24, 1742, Berkeley and Berkeley *Correspondence*, 202. The section quoted at the end of the letter may be to Alexander Catcott in Bristol, not Collinson.

¹¹⁰ John Bartram to Peter Collinson, July 24, 1744; Correspondence of John Bartram 1992: 240-241. The "proprietors gardener" was James Alexander (d. 1778) gardener to the Penn family, Proprietors of the Pennsylvania colony, at Springettsbury their estate at Fairmount in Philadelphia.

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Antigua. From 1760 onward, southern plants from the Carolinas transformed Bartram's garden, and Bartram's half-brother, Colonel William Bartram of Ashwood plantation on the Cape Fear River in North Carolina, became an important source.

Although the tradition of Bartram's annual shipments of boxes of North American seeds continued for years to come, by the 1760s there is evidence of an increasing demand for live plants in Europe, and also evidence of a growing local market for Bartram's plants in Philadelphia. In 1762, writing Collinson about the boxes sent to the nurserymen Powell & Edie, and Henry & John DePonthieus, Bartram remarked: "but I had rather not send them any growing plants I can sell them here for twice what thay will care to give & have my money directly without any risk or ensurance."¹¹¹ John Fothergill suggested that Bartram concentrate on live plants for the London market in 1769. ¹¹² Bartram apparently agreed, replying in the same year: "I must inlarge my nurcery garden." James Gordon (ca. 1708–1780), who previously worked at Thorndon for Lord Petre, had exceptional success with Bartram's seeds at his Mile End nursery near London. Gordon was the first English nurseryman to propagate a number of difficult North American species from seed including: Rhododendron, Kalmia, and Vaccinium. Collinson frequently shared Bartram's most curious seeds with Gordon in the 1750s and 1760s, and Gordon sent Bartram seeds, roots, and bulbs on many occasions. Bartram received a copy of Gordon's catalogue from Collinson in 1762. 114 And Bartram requested kitchen garden seeds from Gordon. Bartram's letters of 1761-1762 contain a string of grumbles regarding Gordon after the general failure of several shipments of plants. In particular, Bartram complained: "Gordons wild teasel seeds came up last year which I destroyed & numerous others are come up this spring which I must eradicate."115

Collinson, Miller, and Gordon were the source of some of Bartram's most prized plants. Through them, Bartram received some of the newest exotics in the London market. Several of these fashionable exotics would never thrive without winter shelter in the climate of Pennsylvania, but Bartram repeatedly attempted to grow Cedar of Lebanon, Italian Cypress, and Pinaster from seed supplied by Collinson. Discussing the difficulties in cultivating Cedar of Lebanon and Stone Pine in North America, Bartram wrote Collinson in 1755, "the sudden extreams of our winters spoils the exoticks." Some plants, although hardy, could not be raised

¹¹¹ John Bartram to Peter Collinson, [Summer 1762?], Correspondence of John Bartram 1992: 565.

¹¹² John Fothergill to John Bartram, May 1, 1769, *Correspondence of John Bartram* 1992: 711. Fothergill's nephew, James Freeman, took over as agent for Bartram's seed boxes following Collinson's death.

¹¹³ John Bartram to John Fothergill, August 12, 1769, Correspondence of John Bartram 1992: 715-716.

¹¹⁴ John Bartram to Peter Collinson, August 15, 1762, Correspondence of John Bartram 1992: 567.

¹¹⁵ John Bartram to Peter Collinson, May 10, 1762, Correspondence of John Bartram 1992: 559.

¹¹⁶ John Bartram to Peter Collinson, March 6, 1755, Correspondence of John Bartram 1992: 378.

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from seed. Bartram only acquired the European Horse Chestnut, *Aesculus hippocastanum*, when his son Moses returned from London in 1752 with a plant from Collinson. ¹¹⁷

Bulbs and other dormant roots proved easier to send, but there were still difficulties. Bartram wrote to Collinson in 1758: "but you have many other sorts which I should be glad of thay are easily sent & keep them but from the fire, water, rats & French thay will do well enough." In the spring of 1761 an exasperated Bartram wrote to Collinson: "no body ever had worse luck with vegitables from London" after receiving the "common little ornithogala" again. He went on:

we have had them in plenty long & I must dig them up & make A burnt sacrifice of them to bad fortune after one or two years carefull nursing in hopes of something rare[.] this puts me in mind of Doctor witts common saying that you send us all the worst & will not let us have the rare ones. 120

In spite of Bartram's many complaints, he did have success with a number of exotic plants, and Bartram's own garden saw the introduction of many including: Acer platanoides, Norway Maple; Aesculus hippocastanum, Horse Chestnut; Ailanthus altissima, Tree-of-Heaven; Arbutus unedo, Strawberry Tree; Buxus sempervirens, Boxwood; Colutea arborescens, Bladder Senna; Cornus mas, Cornelian Cherry; Cytisus scoparius, Scotch Broom; Hedera helix, English Ivy; Larix decidua, European Larch; Laurus nobilis, Laurel; Melia azedarach, Chinaberry; Picea abies, Norway Spruce; Pinus sylvestris, Scots Pine; Platanus orientalis, Oriental Plane; Prunus laurocerasus, Cherry Laurel; Pyracantha coccinea, Firethorn; Quercus robur, English Oak; Sorbus aucuparia, Rowan or European Mountain Ash; Sorbus domestica, Service Tree; Syringa persica, Persian Lilac; Syringa vulgaris, Lilac; Thuja orientalis, Chinese Arborvitae; and Ulex europaeus, Gorse. The success of these exotics at Bartram's Garden is also documented by their presence in sale lists and catalogues of the later generations of the Bartram family.

A number of the fashionable exotics cultivated in English gardens required a greenhouse. In the summer of 1760 John Bartram built a greenhouse to extend his growing season, and to protect

¹¹⁷ Peter Collinson to John Bartram, January 11, 1753, *Correspondence of John Bartram* 1992: 341. Moses Bartram (1732–1809) was the only member of the Bartram family who actually met Peter Collinson in person. Moses was stranded in London during the winter of 1751-1752 while on his first voyage as a seaman. Collinson looked after him and sent him back to Philadelphia with plants for his father. Eleanora Gordon Baird, "Moses Bartram's Account Book, 1778-1788: Notes made by a Philadelphia Apothecary," *Bartram Broadside* (Spring 2003): 1–2.

¹¹⁸ John Bartram to Peter Collinson, November 13, 1758, Correspondence of John Bartram 1992: 440.

¹¹⁹ John Bartram to Peter Collinson, May 22, 1761, *Correspondence of John Bartram* 1992: 516-517. The "common little ornithogala," or Star of Bethlehem, *Ornithogalum umbellatum* remains a common weed in Philadelphia gardens to this day.

¹²⁰ Ibid.

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both tender exotics and some of his own collections from the South. ¹²¹ He wrote to Collinson in 1760:

Dear friend I am A going to build A green-house stone is got & hope as soon as harvest is over beginning to build it to put some pretty flowering winter shrubs & plants for winters diversion not to be crowded with orange trees or those natural to the torrid zone but such as will do being protected from frost.¹²²

Collinson responded a few months later:

I am pleased thou will build a Green House[.] I will send thee seeds of Geraniums to furnish It—they have a charming Variety & Make a pretty show in a Green house but contrive and Make a Stove in it to give heat in Severe Weather...If Millers Cape Roots are planted on open ground—they must be taken up & sett in Potts & then in thy Green House—or Else your Winters kill them. 123

Bartram confirmed that he had finished building the structure, writing in 1762: "I have two flues in the back wall of my greenhouse." ¹²⁴

Greenhouse plants required a significant expenditure in time and money. From classical civilizations onward, the cultivation of tender plants under shelter had been a passion and a sign of wealth. The tradition was revived in renaissance Italy, particularly with the almost cult-like status of citrus trees—oranges and lemons. Many of Bartram's patrons, including Lord Petre and Dr. John Fothergill, had greenhouses and large collections of greenhouse exotics. Collinson had his own greenhouse as well. There were also several greenhouses in Philadelphia constructed before Bartram's—at the Penn family garden, "Springettsbury"; at the Hamilton estate, "Bush Hill"; at the Norris country house, "Fairhill"; and at the town houses of the Pemberton and Logan families.

Bartram soon received seeds or plants of the many of the latest greenhouse exotics. In a few short years following the construction of his greenhouse, Bartram was growing *Acacia farnesiana*, Sweet Acacia; *Cyclamen persicum*, Persian Cyclamen; *Gardenia jasminoides*, Cape Jasmine; *Myrtus communis*, Myrtle; *Nerium oleander*, Oleander; and *Punica granatum*, Pomegranate. In his letters from the 1760s, Bartram records the use of his greenhouse in the propagation of new plants. For example, he described one situation in 1764:

¹²¹ For more detailed historical and graphic information on this structure, see the history, drawing, and photographs of the John Bartram House and Garden, Greenhouse, HALS No. PA-1-B.

¹²² John Bartram to Peter Collinson, June 24, 1760, *Correspondence of John Bartram* 1992: 486. John Bartram's 1760 greenhouse survives as the southernmost section, Room #1, of the long outbuilding now known as the "Seed House." Joel T. Fry, "The 'Seed House' At Bartram's Garden," 1991: 68–72, figs. 35–37.

¹²³ Peter Collinson to John Bartram, September 15, 1760, Correspondence of John Bartram 1992: 492.

¹²⁴ John Bartram to Peter Collinson, December 3, 1762, Correspondence of John Bartram 1992: 579.

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Last summer there came up in my greenhouse from east India seed formerly sowed there an odd kind of Sumach (as I take it to be)[.] it growed in A few months near 4 foot high & continued green & growing all winter & this spring I planted it out to take its chance it shoots vigorously & almost as red as crimson how it will stand next winter I cant say but I intend to cover the ground well about its root. 125

When the French author Crèvecoeur visited, he recorded few details of John Bartram's garden, but did include a telling sketch of Bartram's greenhouse:

From his study we went into the garden, which contained a great variety of curious plants and shrubs; some grew in a greenhouse, over the door of which were written these lines:

'Slave to no sect, who takes no private road, But looks through nature, up to nature's God!' 126

In spite of the relatively large body of Bartram correspondence, the physical features and layout of his garden were not well described. There are only occasional details on the placement of plants in the ground. In recording his trials with the white briony in 1740, Bartram detailed the soils in his garden: "I have tried it in the shade sun hedges north east & south exposures clay gravel & sandy soil & under talle plants" In the course of conveying his difficulties in 1745 with stone fruit due to the curculio insect, Bartram located several trees in his garden:

I planted a plumb tree some years ago in the moist ground near A spring which hath blossomed & set abundance of fruite but thay was all bit & all dropped of last spring I dug & cleaned all the grass from about it but it signifieth nothing but I had 3 trees one at the south end of my house another on the north & another on the west where thay was daly trod about which bore perfect ripe plumbs as thick as thay could crowds together I have last spring planted A nectarine tree on the north end close to my kitchen dore & I design to plant A apricot tree or two on A cold dark northern declivity by my stone quarry where it is never heated with the sun. 128

Throughout the correspondence there are hints of features in the garden, "hedges" beds," beds," border," the driest bank in my garden." the north side of my garden wall where the

¹²⁵ John Bartram to Peter Collinson, May 1, 1764, *Correspondence of John Bartram* 1992: 628. The "odd kind of Sumach" may have been the Tree of Heaven, *Ailanthus altissima*, which was introduced to English cultivation in Collinson's garden in 1751.

¹²⁶ Crèvecoeur 1782: 191. The lines are quoted from Alexander Pope, "An Essay on Man, or the First Book of Ethic Epistles to H. St. John L. Bolingbroke" (1734).

¹²⁷ John Bartram to Peter Collinson, [April 29, 1740], Correspondence of John Bartram 1992: 134.

¹²⁸ John Bartram to Peter Collinson, December 10, 1745, Correspondence of John Bartram 1992: 270.

¹²⁹ John Bartram to Peter Collinson, April 16, 1746, Correspondence of John Bartram 1992: 274.

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sun seldom shines," "A boarded shelter," or "A suny bank." Details of Bartram's horticultural practices are also more common in the later years of his correspondence, writing in 1764:

I have many Carolina seeds come up this spring in the bed I sowed when I cam home...Doctor Shippen gave me some seed last summer which he brought from the south of Europe one fine sumach grew 18 inches...I sheltered them with boards & thay are now very fresh the first I transplanted to one side of my walks. ¹³⁴

In the 1760s, Bartram's comments about his garden reveal a fully evolved and mature collection of plants, particularly showy flowering plants. He observed:

My garden now makes A glorious appearance with the Virginia & Carolina flowers [1760]. 135

I have now A glorious appearance of Carnations from thy seed—the brightest color that ever eyes beheld now, what with thine dr. Witts & others I can challenge any garden in America for variety [1761]. ¹³⁶

I have brought home with me A fine Collection of strange florida plants [1766]. 137

Towards the end of his career, John Bartram realized the difficulty of cataloguing his garden. In 1762, he compiled a "list of our North American trees & shrubs as they occurred to my memory most of which I have growing on my land," for Colonel Henry Bouquet. This list included 168 species of North American trees and shrubs, but according to Bartram it was not a complete catalogue of his garden, he explained:

to send A list of plants of All the species which I collected from new England to Carolina & from the sea coast to Lake Ontario would take up more time then I have to spare at present besides I have many plants that is so young that thair proper Characters is not so visible as to ascertain thair Genus & many that is A quite new Genus. ¹³⁸

¹³⁰ John Bartram to Philip Miller, June 16, 1758, Correspondence of John Bartram 1992: 436.

¹³¹ John Bartram to Peter Collinson, May 10, 1762, Correspondence of John Bartram 1992: 559.

¹³² John Bartram to Peter Collinson, July 19, 1761, Correspondence of John Bartram 1992: 529.

¹³³ John Bartram to Peter Collinson, May 1, 1764, Correspondence of John Bartram 1992: 628.

¹³⁴ Ibid., 627-628.

¹³⁵ John Bartram to Humphry Marshall, September 17, 1760, Correspondence of John Bartram 1992: 495.

¹³⁶ John Bartram to Peter Collinson, July 19, 1761, Correspondence of John Bartram 1992: 529.

¹³⁷ John Bartram to Peter Collinson, June 1766, Correspondence of John Bartram 1992: 668-669.

¹³⁸ John Bartram to Henry Bouquet, May 3, 1762, Correspondence of John Bartram 1992: 555-557.

Around the same date in 1762 Bartram repeated this thought to Peter Collinson:

it would be difficult to make A catalog of all the plants trees & shrubs in my garden as I try to procure A great variety of species of each genus & I have many plants growing that is many year before thay flower to ascertain the Genus & many new ones. 139

The most complete source for the documentation of the trees and shrubs growing in John Bartram's garden is the broadside *Catalogue Of American Trees, Shrubs And Herbacious Plants...*, published in Philadelphia in 1783. ¹⁴⁰ Bartram's sons, John, Jr. and William, issued this list at the end of the American Revolution. The *Catalogue* records that most of the plants "are now growing, and produce ripe Seed in John Bartram's Garden, near Philadelphia." The 1783 list includes 218 species of largely woody North American plants; only a half-dozen or so were herbaceous. Most of these plants had been collected and planted by the first John Bartram before his death in 1777. At the end of the list are "Three Undescript Shrubs, lately from Florida": "Philadelphus" (*Philadelphus inodorus*), "Alatamaha" (*Franklinia alatamaha*), and "Gardenia" (*Fothergilla gardenii*), which were William Bartram's contribution to the family garden from his travels in the South. At least a dozen well-known trees and shrubs known to have been grown by John Bartram do not appear on the 1783 list. ¹⁴¹

Beyond textual sources for the type and location of trees and plants at Bartram's Garden, there are a couple of extant graphic documents providing some insight into the historic Bartram landscape. Bartram's house is indicated on the *Map of Philadelphia and Parts Adjacent* (1752) by Nicholas Scull and George Heap. ¹⁴² This map indicates the growth in settlement in the surrounding neighborhood of Kingsessing, particularly along the road from Darby to the Lower Ferry operated by the Gray family. It includes a number of family names and locations in the city's "Liberty Lands," but it does not delineate property boundaries. A similar symbol is used for all dwellings; however, it is probably significant that the Bartram name is in slightly larger script and the house is drawn larger than most of the neighbors.

¹³⁹ John Bartram to Peter Collinson, May 10, 1762, Correspondence of John Bartram 1992: 558.

¹⁴⁰ [William Bartram], Catalogue Of American Trees, Shrubs And Herbacious Plants, most of which are now growing, and produce ripe Seed in John Bartram's Garden, near Philadelphia (Philadelphia, 1783). See also, Joel T. Fry, "An International Catalogue," 1996.

¹⁴¹ Fry, "An International Catalogue," 18.

¹⁴²Nicholas Scull and George Heap, *A Map of Philadelphia and Parts Adjacent. With a Perspective View of the State-House*, engraved by Lawrence Hebert (Philadelphia, 1752), and Martin P. Snyder, *City of Independence: Views of Philadelphia Before 1800* (New York: Praeger Publisher, Inc., 1975), 36–41. The Scull and Heap map was re-engraved and reprinted a number of times in Europe, especially during the American Revolution. One of the most common reproductions, William Faden's (London, 1770), misspelled Bartram as "Fartram." The houses north of Bartram's labeled "White" and "Jones" were located on land owned by John Bartram, possibly leased to tenants.

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Only a single eighteenth-century illustration is known of the Bartram house and garden, entitled "A Draught of John Bartram's House and Garden as it appears from the River." This schematic view of garden in late 1758 is now generally thought to be by young William Bartram. It is an attempt at a plan and perspective drawing at same time, and so is not true to scale, but it does contain a wealth of detail. The 1758 view indicates the enlargement of Bartram's house and the construction of a new classical facade as already under way. A single one story bay of the new façade, the "pantry," is in place, but the bulk of the house remains largely what John Bartram had completed around 1731, with a gambrel roof and pent eaves between the first and second stories. Several outbuildings are also indicated on the draught; Bartram's "Studey" is shown to the southeast of the house on the garden terrace. Had A small rectangular outbuilding with a simple shed roof is shown just north of the house. This early structure might be preserved as part of the long "Seed House."

When looking at the natural landscape, the draught shows the garden divided into two major parts—an upper garden on the terrace adjacent to the house and a larger lower garden to the east below the terrace wall. Bartram specified several planting areas in his garden: an "Upper Kitchen Garden," a "Common Flower Garden," a "New Flower Garden," and a "Lower Kitchen Garden." These plots are all fenced or defined by the terrace. The main collection of large specimen trees is planted along two long walks the run the length of the lower garden. A "Pond," in the center of the lower garden is feed by a "Spring head convaid underground to the Spring or Milk House." Although the garden plots are defined, there is little detail of the actual plantings. Stylized trees line the allées along the south edge of the lower garden, and trees are also indicated along the north fence, possibly espaliers. A few other isolated trees may mark important specimens, including a Bald Cypress, *Taxodium distichum*, at the southwest corner of the springhouse that survived as a landmark at the garden into the twentieth century.

The overall impression is of this landscape is that of a personal garden. The kitchen garden occupies more than one half of the fenced area, and its produce was an important part of John Bartram's cultivation efforts. The allées of trees were probably under-planted with shrubs, and likely flower borders as well. The two flower gardens are not large by modern commercial

¹⁴³ The 1758 drawing of the house and garden is likely by William Bartram. Entitled "A Draught of John Bartram's House and Garden as it appears from the River," Peter Collinson added the date "1758" and his own name "Sent to P Collinson." The plan is now housed in a volume of drawings once owned by Collinson and now located in the library of the Earl of Derby at Knowsley Hall. Dorothy T. Povey, "Garden of a King's Botanist." *Country Life* 119 (Mar. 22, 1956): 549–550. Bartram sent the "Draught" to Peter Collinson late in 1758. Peter Collinson to John Bartram, April 6, 1759, *Correspondence of John Bartram* 1992: 463.

¹⁴⁴ The study building no longer exists above ground, and archaeological excavations in 1980 aimed in part to discover any remnant had little success. Joel T. Fry, "Archaeological Research at Historic Bartram's Garden," 1998: 4-5. Bartram's "Studey" may have been a single-cell log house dating back to the farm's Swedish occupation. See James A. Jacobs, "John Bartram House and Garden, House" HALS No. PA-1-A, Historic American Landscapes Survey (HALS), National Park Service, U.S. Department of the Interior, 2001, 13.

¹⁴⁵ It may be incorporated into Room #2 of the "Seed House." See Fry, "The 'Seed House' At Bartram's Garden," 1991: 68-69, fig. 35.

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standards, but suit the intensive cultivation of an individual plantsman. To signify the owner of the garden, William drew his father standing in the lower garden surveying his domain.

The new façade for Bartram's emerged over the course of the 1760s. In a letter to Collinson dated May 30, 1763, Bartram refers to a vine that "ran near 30 foot up a stone pillar last year." This "pillar" is almost certainly one of the three stone columns which ornament the porch of the river facade of the house. It has been assumed that John Bartram completed his classical additions ca. 1770 as a second date stone and inscription on the east front of the house runs as follows:

IT IS GOD ALONE, ALMYTY LORD THE HOLY ONE BY ME ADOR'D IOHN BARTRAM 1770

Bartram probably also completed interior alterations to the house around the same time for he wrote his friend Franklin in London, in November of 1770 that the portraits of four "worthies," Linnaeus, Franklin, Edwards, and Collinson adorned the walls of his "new stove and lodging room which I have made very Convenient for thair reception."¹⁴⁷

John Bartram, Sr. retired in the spring of 1771, although he had previously begun dividing his estate among his children. In August 1753, he had deeded his son James, 64 acres of riverfront land, part of the tract originally purchased from Andrew Jonason in 1735. ¹⁴⁸ In late April 1771 Bartram wrote Franklin: "My eyesight fails me very much and I am going to thro all my business into my Son John's hands except part of my garden." ¹⁴⁹ His son John married a cousin, Elizah Howell, in May 1771. Following this marriage, John, Sr. and his wife Ann moved into the southern half of the expanded Bartram house, and John, Jr. and Elizah occupied the northern portion. Bartram apparently lived quietly at his garden until his death on September 22, 1777, just before the British occupation of Philadelphia following the Battle of Brandywine.

John Bartram, Sr.'s will, written in January 1772 and proved August 1779, almost two years after his death, provided for a division of the farm and garden property in Kingsessing. ¹⁵⁰ Son James Bartram received the rest of the northern farm tract, purchased by Bartram in 1735 from Andrew Jonason, for a total of a little over 142 acres. John Bartram, Jr. received "all my plantation whereon we live" between David Gibson's and James Bartram's land, if he allowed her to continue occupying the house's southern portion, use one of the cellars, provide her with

¹⁴⁶ John Bartram to Peter Collinson, May 30, 1763, Correspondence of John Bartram 1992: 594.

¹⁴⁷ John Bartram to Benjamin Franklin, November 24, 1770, Correspondence of John Bartram 1992: 735.

¹⁴⁸ "Indenture... John and Ann Bartram and Son James Bartram, August 7, 1753."

¹⁴⁹ John Bartram to Benjamin Franklin, April 29, 1771, Correspondence of John Bartram 1992: 739.

¹⁵⁰ The delay in settling John Bartram's stemmed from disruptions related to the Revolution, and possibly by the still unsettled position of Quakers under the new Pennsylvania government.

provisions and firewood, and allow her passage to the well. Through this arrangement, John, Jr. received the bulk of the family farm property, 139 plus acres including the house, garden and outbuildings.¹⁵¹

The Second Generation: John Bartram, Jr. and William Bartram

William Bartram was arguably John Bartram's most famous son and a naturalist of renown in his own right, but he did not inherit the family garden and farm in Kingsessing. He spent his primary inheritance from his father in Florida in 1766 to purchase six slaves and supplies in order to secure a grant of 500 acres on the St. John's River. William Bartram's plantation on the St. Johns River failed within a year. ¹⁵²

William had accompanied his father on a number of collecting expeditions, most notably the trip south to Florida in 1765. After a number of false starts in business and the disastrous failure as a planter in Florida, William received the sponsorship of Dr. John Fothergill for exploration of the Carolinas, Georgia and Florida. From the spring of 1773 through January 1777, William Bartram was on the longest and most important trip of discovery and natural research of his life. ¹⁵³ Upon his return to Philadelphia, William spent the rest of his life at the garden. Several years were spent compiling an account of his travels; publication of this work was delayed a number of years, but it was eventually printed in Philadelphia in late 1791. ¹⁵⁴ It has since become a classic in travel literature, in natural description, and for its early romantic literary style. ¹⁵⁵

¹⁵¹ Register of Wills, Philadelphia County, 1779: Will #222; Kenyon et al. 1975: 8–9.

¹⁵² Daniel L. Schafer, "The Forlorn State of Poor Billy Bartram," *El Scribano: The St. Augustine Journal of History* 32 (1995): 1–11. William Bartram's grant of 500 acres was recorded in February 1766, and he spent approximately eight months on the east bank of the St. Johns River attempting to grow rice and indigo. The plantation site was downriver from Fort Picolata near Six Mile Creek at what is currently known as Little Florence Cove and Smith Point.

¹⁵³ William Bartram, "Travels in Georgia and Florida, 1773-74: A Report to Dr. John Fothergill," Francis Harper, ed., *Transactions of the American Philosophical Society* 33 (Nov. 1943): 121–242.

¹⁵⁴ Francis Harper, "Proposals for Publishing Bartram's *Travels*," *American Philosophical Society Library Bulleti* (1945): 27–38.

⁽Philadelphia, 1791). Editions of *Travels* appeared in London in 1792 and 1794; Dublin in 1793; Berlin and Vienna in 1793; Haarlem between 1794 and 1797; Amsterdam in 1797; and Paris in 1799 and 1801. A modern annotated edition was produced by Francis Harper, *The Travels of William Bartram: Naturalist's Edition* (New Haven: Yale University Press, 1958). Although much has been written on William Bartram, a scholarly biography is still lacking. Harper's edition of *Travels* is a good starting point; also satisfactory, but now outdated is N. Bryllion Fagin, *William Bartram: Interpreter of the American Landscape* (Baltimore: Johns Hopkins University Press, 1933). Much information is summarized in Robert M. Peck's biographical study, "William Bartram: The Man," *Bartram Heritage Report, A Report to the Heritage, Conservation and Recreation Service*, ed. Robert McCracken Peck (Montgomery, AL: U.S. Department of the Interior, Bartram Trail Conference, 1979), 8–63. Joseph Ewan's introduction to *William Bartram: Botanical and Zoological Drawings, 1756-1788* (Philadelphia: American Philosophical Society, 1968), also contains a great deal of biographical information unavailable elsewhere. Several recent studies have concentrated on William's southern travels including: *William Bartram on the Southeastern Indians*, ed. Gregory A. Waselkov and Kathryn E. Holland Braund

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William led the life of a retired, enlightenment sage at the garden. A compound fracture of a leg suffered as a result of a fall while gathering cypress seeds in the garden, ca. 1786, may have helped to enforce his retirement. 156

The exact business relationship between William and his brother, John, is not known, but from surviving manuscripts, it appears William tended to the written and academic side of the partnership, while John continued the annual gathering trips. Both worked cultivating the garden, and both probably packed seeds and plants for shipment abroad. Surviving plant lists, catalogues, plant descriptions, and bills from this period are all in William's hand. William almost certainly prepared the text for the printed catalogues issued by the garden ca. 1783, 1807, 1814, and 1819, and the nomenclature and systematics of these catalogues represent one of William Bartram's major contributions to the science of botany, although they have largely been ignored. William also continued to describe and draw new plants for science. He prepared a number of illustrations for publication, notably for Benjamin Smith Barton's *Elements of Botany*, the first American text on botany, published in 1803.

The American Revolution, and its associated European conflicts, disrupted all international trade, and of course the trade in seeds and plants. The Bartrams were virtually cut off from their European customers for at least eight years. The decade leading up to the Revolution saw political and social unrest in the North American colonies, and this also disrupted traditional trade patterns. Philadelphia merchants signed non-importation agreements beginning in 1765, and they renewed these pledges in the 1770s. This slowed or stopped European shipping from Philadelphia for long periods even before the outbreak of war. The trade between the Bartrams and customers in Britain declined and was probably stopped by 1775.

Business at the garden lulled as transportation to Europe was interrupted, but it was revived again at least by early 1779. In March 1779, John and his brother William Bartram prepared a small box of twenty-two varieties of roots and seeds and two large boxes of over 40 varieties of plant roots "for his Exell" the French Minister." Joseph Matthias Gerard de Rayneval, or Sieur Gerard, the first French minister to the new government of the United States, arrived in

(Lincoln, NE: University of Nebraska Press, 1995), and Edward J. Cashin, *William Bartram and the American Revolution on the Southern Frontier* (Columbia: University of South Carolina Press, 2000). Thomas P. Slaughter's dual biography, *The Natures of John and William Bartram* (New York: Alfred A. Knopf, 1996) provides a uniquely personal, but oddly non-historical approach to the relationship between John and William Bartram.

William Bartram to Benjamin Smith Barton, undated draft, ca. Aug. 26, 1787 or Feb. 19, 1788, Item 104A, Jane Gray Autograph Collection, Archives of the Gray Herbarium, Harvard University, Cambridge, Massachusetts; Dr. Autenrieth to William Bartram, November 9, 1795, Bartram Papers 1:1, HSP; William Bartram to Lachlan McIntosh, May 31, 1796, New York Historical Society, Misc. Mss. Bartram; Ewan, William Bartram: Botanical and Zoological Drawings, 1968: 12.

¹⁵⁷ Fry, "An International Catalogue," 1996: 9–14.

¹⁵⁸ "Catalogue of Roots & Seeds in a Small Box for his Exelly the Minister of France" and "Catalogue of Roots in two Boxes for his Excelly the French Minister," Bartram Papers 4: 106, HSP.

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Philadelphia July 12, 1778, and remained on duty until ill health required his return to France in October 1779.

There was a large demand for North American seeds and plants in France, particularly as the war with Britain had cut off usual sources of plant material. Benjamin Franklin wrote to John Bartram from Paris on May 27, 1777, soon after his arrival there as the American minister. Franklin suggested that the Bartrams "send the same number of boxes here, that you used to send to England, because England will then send here, for what it wants in that way." It is likely that regular shipping was not possible until the French Alliance in 1778 when convoys could be protected by the French fleet. Sieur Gerard ordered at least three other shipments of plants from the garden including two boxes of forty-one varieties of "growing Roots of Trees Shrubs & Plants," prepared in August 1779, and another box of thirty-three varieties Gerard took with him on his return to France in October 1779. Draft catalogues for these shipments survive, in William Bartram's handwriting on the backs and blank pages of his father's pre-war correspondence. One of these boxes for Sieur Gérard included two of the original seedlings of the as yet unnamed Franklinia, "to be planted in the Royal garden at Versailes." ¹⁶¹

With the end of American hostilities in 1781, and the Treaty of Paris in the spring of 1783 bringing European peace, John and William Bartram issued a printed catalogue in 1783. The Bartram *Catalogue* of 1783 was a simple one-page list, a "broadside" of plants and seeds available for sale from their garden, and Benjamin Franklin arranged for publication of the list in Paris. This single large sheet is the first botanic list of North American plants to be printed in America, and is also one of the earliest known nursery catalogues from the United States. In botanic shorthand, the catalogue described the native plant collection that was unique to Bartram's Garden. ¹⁶²

¹⁵⁹Benjamin Franklin to John Bartram, May 27, 1777, *Correspondence of John Bartram* 1992: 771. During the British occupation of Philadelphia in the autumn-spring of 1777-1778, several officers showed interest in obtaining plants from the Bartram Garden. See W. Frazer, Capt. Guards to John or William Bartram, December 15, 1777, Bartram Papers 4:1, HSP.

¹⁶⁰ "List of Seeds collected for the Minister of France July Ano 1779," Bartram Papers 1:75, HSP; "List of growing Roots of Trees Shrubs & Plants, for his Excell^y Gerard Minister of France. Pennsylvania, Augt. 20, 1779," Bartram Papers 4:82, HSP; "Catalogue of growing Roots of Forest Trees Shrubs & Plants planted in a Box for his Excelly the Sieur Gerard late Minister of France to the United States," Bartram Papers 4:75, HSP.

¹⁶¹ John and William Bartram to Carl Linnaeus, Jr., August 16, 1783, Uppsala University Library, MsUUB G 359 (Bartram), Uppsala, Sweden.

^{162 [}William Bartram], CATALOGUE of American TREES, SHRUBS and HERBACIOUS PLANTS, most of which are now growing, and produce ripe Seed in John Bartram's Garden, near Philadelphia. The Seed and Growing Plants of Which are disposed of on the most reasonable Terms. ([Phila.]: [1783]); CATALOGUE D'ARBRES D'ARBUSTES ET DE PLANTES Qui croissent en Amérique, & produisent des Graines en Maturité dans le Jardin de John Bartram, près de Philadelphia, qui se vendent en Plantes ou en Graines, le tout à juste Prix (Paris, 1783). Currently, only two copies of the Catalogue's Philadelphia edition are known to exist: Broadside Collection, Ab N.D. 251, HSP and Broadside Collection, Rare Book and Special Collections Division, portfolio 148, number 3, Library of Congress, Washington, D.C. (hereafter LOC). A single copy of the French version in this country is known to exist at the APS. See Fry, 1996, appendix C.

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Early seed and plant lists from the Bartram Garden exist only in manuscript form. They were circulated in laboriously hand-copied versions to selected correspondents. Catalogue lists were usually included with each box or shipment of seeds. Printing the catalogue as a broadside was an obvious way to reduce the tedious labor of hand copying. Lists of seeds supplied by the Bartrams had already appeared in print in the columns of the London *Gentleman's Magazine* as early as the 1750s, placed there by Peter Collinson. ¹⁶³

The 1783 broadside is the most complete eighteenth-century list of the Bartram collection of American plants, and summarizes the collecting career of the first John Bartram. There was a progression of knowledge from the earliest Bartram plant lists at the garden to the printed *Catalogue* of 1783. Names were added as new native plants were discovered, and names changed as international scientific nomenclature developed; however, the 1783 *Catalogue* continued the basic format and repeated many of the common names found on the earliest plant catalogues compiled by John Bartram, Sr.

It is difficult to estimate the business at the garden from 1780 onward because no ledgers or daybooks survive, only a few letters, scattered bills, and orders. ¹⁶⁴ The business in North American seeds begun by John Bartram and Peter Collinson is well chronicled in Bartram's many letters and Collinson's own papers. There is not a similar, detailed archive for the activities of the later Bartram generations. William Bartram's correspondence has never been published in its entirety, and letters that do survive are more often addressed to North American correspondents

West Jersey by John Bartram, Botanist," ca. 1736–1746, 106 plant species in all, copied by Joseph Breintnall, John Bartram's friend, in John M. Fogg, Jr. "A List of Bartram Trees and Shrubs," *Morris Arboretum Bulletin* 18 (Dec. 1967): 75–81. On May 3, 1762, John Bartram wrote out a list of 168 plants for Colonel Henry Bouquet, adding "our North American trees & shrubs as they occurd to my memory most of which I have growing on my land," *Correspondence of John Bartram* 1992: 555-557. See also "A list of Seeds arrived this year from our North American Colonies—Dec. 1751," *The Gentleman's Magazine* 21 (1751): 561, and "A List of Seeds of Forest Trees and flowering Shrubs gather'd in Pensilvania, the Jerseys and New York, by John and William Bartram, and sent over the last Year to their Correspondents, being the largest Collection that has ever before been imported into this Kingdom," *The Gentleman's Magazine* 24 (1754): 65. It is entirely possible that by the early 1770s, John Bartram had already printed a catalogue for European and local sales, but no copy is known to survive, and it remains speculation.

¹⁶⁴ It is likely that ledgers, daybooks, receipt books, and other formal accounts were kept for the Bartrams' business in this period following the Revolution, if not before. Such written accounts were essential in maintaining records for transactions whose payments might be delayed from six months to a year, or more, after shipment. William Bartram was apprenticed to Philadelphia merchant, Captain James Childs, ca. 1756–1760, and one of his duties would have almost certainly been keeping such accounts. Some accounts do survive for other Bartram children, particularly Isaac and Moses Bartram, who were apothecaries in the city of Philadelphia. A Moses Bartram receipt book remains in private hands (available on microfilm at the American Philosophical Society (APS), Philadelphia, Pennsylvania), and the John Bartram Association owns a small account book used by Moses Bartram and his son Dr. Moses Bartram ca. 1783–1788. A daybook used by "Isaac Bartram and Son," 1790–1803, lodged at Clements Library, University of Michigan, Ann Arbor, Michigan, contains a number of entries relating to John Bartram, Jr. Some of these detail the negotiation of bills of exchange to Bartram in payment for shipments to the English nurserymen Conrad Loddiges and Reginald Whitley.

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rather than European. When the business of the garden revived after the Revolution, there was no single middleman overseeing the business in Europe, so William never developed a transatlantic friendship like his father did with Collinson.

Despite this dearth of correspondence, the increasing number of plant species recorded in manuscript catalogues from Bartram's Garden suggests the Bartram brothers ran a successful business in the last two decades of the eighteenth century. A collection of live plants "sent to Europe for Mr. Pierepoint By John & Wm. Bartram" in October 1784 contained 162 species of trees and shrubs and fifty-eight species of herbaceous plants. 165 These live collections packed a complete botanic garden in a box. Other orders, ca. 1780–1807, indicate similar shipments of large collections consisting of live plants and roots to European and North American destinations, with generally smaller sales to local customers. Seeds were still shipped annually to Europe in bulk, in boxes valued at £5 and more, and these boxes still probably formed the core of the family business, but the scale of these shipments remains largely unknown. John and William had had long experience in assisting their father in the seed and plant business that kept the botanic garden viable, and were both skilled gardeners and nurserymen. The Bartram brothers conducted business much as their father, packing boxed assortments primarily intended for wealthy estate gardeners. The most curious seeds were split in very small numbers among their boxes. Attempting to raise the Stewartia, Madame de Tessé complained "the Philadelphia merchants only put one or two seeds in their assortments."166

Over a period of several years in the 1780s, the Bartrams were involved in the planting of Samuel Vaughan's State House Garden, an innovative public garden in Philadelphia. Vaughan, a longtime friend of Benjamin Franklin from London, arrived in Philadelphia in September 1783. He was soon elected to membership in the American Philosophical Society, and as one of its vice presidents became active in the construction of their new building, south of the State House on Fifth Street. Vaughan became interested in developing the walled square behind the State House, adjacent to the new headquarters for the Philosophical Society. Between 1785 and 1787, with donations of plants and some money from the Pennsylvania government, he laid out a fashionable pleasure garden in the small square. Perhaps the first public garden in Pennsylvania, at its completion in 1790 the *Columbian Magazine* reported:

It consists of a beautiful lawn, interspersed with little knobs or tufts of flowering shrubs, and clumps of trees, well disposed. Through the middle of the gardens,

¹⁶⁵ "Catalogue of No. American Trees, Shrubs & herbs collected & sent to Europe for Mr. Pierepoint By John & Wm. Bartram, Philadelphia Octo^r. 1784," Bodleian Library, Sherard MS, 453,f50, now housed at the Department of Plant Sciences Library, University of Oxford, United Kingdom.

¹⁶⁶ Madame de Tessé, Chaville to Thomas Jefferson in Paris, August 8, [1788], as quoted in Gilbert Chinard, *Trois Amitiés française de Jefferson* (Paris, 1927), 104-106.

¹⁶⁷ Sarah P. Stetson, "The Philadelphia Sojourn of Samuel Vaughan," *Pennsylvania Magazine of History and Biography* 73 (Oct. 1949): 459-474.

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runs a spacious gravel-walk, lined with double rows of thriving elms, and communicating with serpentine walks which encompass the whole area. 168

In April 1785, Vaughan compiled a list of the varieties he had planted in the State House Square. The list was sent to Humphry Marshall with a letter dated May 28, 1785, where he announced: "as it is my wish to plant in the State house square, specimens of every tree and shrub that grows in the several states in this Continent, that will thrive here, I have enclosed a sketch of each as I have been able to procure." ¹⁶⁹

Vaughan's list includes over 700 trees and shrubs from forty species he had obtained gratis, and more importantly details seventy plants of fifty-five species he had purchased from the Bartrams. The donations may not have all been planted at the State House—the list included 100 American elms donated by Colonel George Morgan, some of which were planted at the Academy and elsewhere in the city. Most, but not all of the Bartram plants purchased for the garden, were North American natives. They were apparently destined for two or more clump plantings, which may have been the most stylish part of Vaughan's design. When Vaughan wrote Marshall, he still wanted plants from thirty additional species.

Completing Vaughan's landscape took several years, and there is evidence that it was maintained for several years to follow. The initial planting described in the May 1785 letter to Marshall may have been completed by the middle of 1785, and was likely overseen by gardener John Lithen. He is recorded for 20.5 days' wages in the State House Yard Work Rolls. ¹⁷⁰ The state paid Vaughan's bills for additional plants from the Bartrams for the State House Garden in 1786 and 1787. In February 1787, Vaughan noted progress on the garden: "NB There is a small place yet to sod, and a supply of plants will be wanted of Bartram to replace some that has failed in the two first Clumps."

After several years in Jamaica, Samuel Vaughan stopped briefly in Philadelphia in 1790, before permanently returning to England. He seems to have been concerned about the condition of the State House Garden, and again involved William Bartram with its maintenance.

I sent to Mr. Wm. Bartram to assist in making a list of the Trees & Shrubs wanted to supply the Statehouse Garden. This list together with the estimation is in your possession, if approved of, it may & should be quickly & well executed by him,

¹⁶⁸ The Columbian Magazine (Jan. 1790): 25-26.

¹⁶⁹ "Planted in the State-house square," and Samuel Vaughan to Humphry Marshall, May 28, 1785, series X, manuscripts, box 10/4, file "Humphry Marshall Papers," United States Department of Agriculture History Collection, Special Collections, National Agricultural Library, Washington, D.C.

¹⁷⁰ Independence Square, State House Yard, Work Rolls, 1785, Jan.-Jul. 6, Pennsylvania State Archives, Harrisburg, Pennsylvania. The gardener and nurseryman John Lithen was probably involved in another of Vaughan's Philadelphia garden projects, the Gray's Ferry Garden, which is not as well documented.

¹⁷¹ Pennsylvania Historical and Museum Commission, MSS V; State House Yard Maintenance, 1787, Independence Square Folder, both Division of Public Records, Harrisburg, Pennsylvania.

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as he is fully competent to the business, which I conceive not to be the case of the English Gardiner proposed, who not being acquainted with the productions of this County & who hath neither ability to judge or means to procure the variety necessary to supply those destroyed or dead. ¹⁷²

In addition to being occupied with the nursery business, the Bartrams also hosted a procession of American and European visitors in the years following the Revolution, building on a reputation as an important garden established during John Bartram, Sr.'s lifetime. Count Francesco dal Verme, of Milan, wrote that "the garden is luxuriant" after an October 1783 visit. ¹⁷³ Johann David Schöpf, chief surgeon with the Ansbach troops in North America, visited Bartram's Garden several times during a brief stay in Philadelphia in the middle of 1783, writing:

During the first days of my stay at Philadelphia, I visited among others Mr. Bartram, the son of the worthy and meritorious botanist (so often mentioned by Kalm) who died six years ago at a great age. Bartram the elder was merely a gardener, but by his own talents and industry, almost without instruction became first botanist in America, honored with their correspondence by Linnaeus, Collinson, and other savans.

...The son, the present owner of the garden, follows the employments of his father, and maintains a very respectable collection of sundry North American plants, particularly trees and shrubs, the seeds and shoots of which he sends to England and France at a good profit. He is not so well known to the botanical world as was his father, but is equally deserving of recognition. When young he spent several years among the Florida Indians, and made a collection of plants in that region; his unprinted manuscript on the nations and products of that country should be instructive and interesting. In the small space of his garden there are to be found assembled really a great variety of American plants, among others most of their vines and conifers, species of which very little is generally known. 174

Like Kalm before him, Schöpf learned a great deal during his time at Bartram's Garden, and this informal education is reflected in several publications on North American natural history that followed on his return to Germany. It is interesting that on account of his botanic knowledge, Schöpf believed William Bartram to be the garden's owner, rather than his brother John.

On June 10, 1787, George Washington stopped at the garden for the first time, and briefly described the event, writing:

¹⁷² Samuel Vaughan to Charles Biddle, March 22, 1790, *Pennsylvania Archives*, First Series, 11, 674-675.

¹⁷³ Seeing American and Its Great Men: The Journal and Letters of Count Francesco dal Verme 1783-1784, ed. and trans. Elizabeth Cometti (Charlottesville: University Press of Virginia, 1969), 35.

¹⁷⁴ Johann David Schöpf, *Reise durch einige der mittlern und südlichen Vereinigten nordamerikanischen Staaten nach Ost-Florida und den Bahama-Inseln unternommen in den Jahren 1783 und 1784*, 2 vols (Erlangen, 1788); *Travels in the Confederation*, 1783-1784, trans. Alfred J. Morrison (Philadelphia, 1911), vol. 1, 90–93.

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Breakfasted by agreement at Mr. Powell's, and in Company with him rid to see the Botanical garden of Mr. Bartram; which, tho' Stored with many curious plts. Shrubs & trees, many of which are exotics was not laid off with much taste, nor was it large. 175

Nevertheless, Washington returned on a number of occasions, and sought advice on live fencing from the Bartrams. He particularly admired the red cedar hedges on the Bartram farm and attempted to duplicate them in Virginia. Two large shipments of plants went from Bartram's Garden to Mount Vernon in 1792. ¹⁷⁶

The early morning visit of the Reverend Manasseh Cutler with members of the Constitutional Convention in July 1787 is one of the best-know descriptions of Bartram's Garden.

This is a very ancient garden, and the collection is large indeed, but is made principally from the Middle and Southern States. It is finely situated, as it partakes of every kind of soil, has a fine stream of water, and an artificial pond, where he has a good collection of aquatic plants. There is no situation in which plants or trees are found but that they may be propagated here in one that is similar. But every thing is very badly arranged, for they are neither placed ornamentally nor botanically, but seem to be jumbled together in heaps... From the house is a walk to the river, between two rows of large, lofty trees, all of different kinds, at the bottom of which is a summer-house on the bank, which here is a ledge of rocks, and so situated as to be convenient for fishing in the river. 177

In 1788, Benjamin Franklin advised Mary Stevenson Hewson, an old friend and recent émigré to Philadelphia, to place her son with the Bartrams to learn the art of farming. She wrote to her sister-in-law later in that year:

so it was agreed that William should go to M^r . Bertram's about six miles from Phila. where I believe I told you he spent some time with Mr. Williams when he was preparing for commencement. Bertram is a plain sensible man, attentive to his farm and a great botanist. An elder brother—who is a man of science lives

¹⁷⁵ *The Diaries of George Washington*, ed. Donald Jackson and Dorothy Twohig (Charlottesville: University Press of Virginia,1979), vol. 5 (July 1786-December 1789), 166-167.

¹⁷⁶ George Washington to Anthony Whiting, October 28, 1792, *The Diaries of George Washington*, vol. 5 (July 1786-December 1789), 183; George Washington to Anthony Whiting, February 10, 1793, *The Writings of George Washington*, ed. John C. Fitzpatrick (Washington, D.C.: U.S. Government Printing Office, 1939), 32, 195; *The Writings of George Washington*, 32, 341; "Catalogue of Trees, Shrubs, & Plants, of Jn°. Bartram," Mar. 1792, George Washington Papers, LOC, printed in Philander D. Chase, *The Papers of George Washington: Presidential Series*, 10 (Charlottesville: University of Virginia Press, 2002), 175–183; List of ninety-seven species sent from Bartram's Garden to Mount Vernon for George Washington, in hand of Bartholomew Dandridge, Washington's secretary, November 7, 1792, George Washington Papers, LOC.

¹⁷⁷ Manasseh Cutler, July 1787, in *Life, Journals, and Correspondence of Rev. Manasseh Cutler, LL.D*, 2 vols, ed. William Parker and Julia Perkins Cutler (Cincinnati, 1888), vol. 1, 272-273.

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with him and his mother, a prudent old woman. He is a widower with several children. I pay two dollars / that is nine shillings sterling / a week for his board, and he seems very well pleased with his situation. He has been upon several expeditions with Bertram to collect curious plants & seeds. It is a quaker family...The character of a farmer is here much respected, and we should be able to purchase land enough to put him upon the footing of a gentleman. ¹⁷⁸

The English industrialist, Henry Wansey visited the garden in 1794, and described his perceptions of the place:

Monday, June 9, went with Mr. St. George and Mr. Henry over the ferry of the Skuylkill, to visit Mr. Bartram, the famous botanist, who gives us such surprising stories, in his publication of his fierce battles with the alligators, on the coasts of Georgia, etc. while botanizing...I saw his green-house and shrubbery: here, I confess, I was much disappointed, to find so little to look at. 179

The British agriculturist, Sir William Strickland toured North America in 1794-1795, to examine farming practices. Before this tour, he offered to collect seeds for friends in Yorkshire, but soon realized the scope of the task, obeserving: "I little knew what I had undertaken...finding it would be a work of years, if ever to be accomplished by one man to make a tolerable collection." Strickland was in Philadelphia by mid-December 1794 and in a letter conveyed some of the information he learned from William Bartram:

The first thing I did after my arrival here a few days since was to enquire for Bartram the Botanist...Bartram tells me that not more than two thirds of the forest trees, one third of the shrubs, and not one fourth of the herbaceous plants of this country are yet known to the Botanists or have ever been seen in Europe. ¹⁸¹

The attitudes of visitors appear to have varied relative to knowledge or interest in botany. The Duc De La Rochefoucauld-Liancourt visited in the spring of 1795, and did not appreciate the Quaker simplicity of the Bartram family. He found whichever Bartram he met plain to the point of rudeness, dirty, and living in a hovel, but nevertheless a great supporter of the French cause. ¹⁸² Just a few years later, Portuguese naturalist Hipólito José da Costa encountered John

¹⁷⁸ Mary Hewson to her sister-in-law, Barbara Hewson, October 21, 1788, APS Library.

¹⁷⁹ Henry Wansey and His American Journal, 1794, ed. David John Jeremy, in Memoirs of the APS, 82 (Philadelphia: American Philosophical Society, 1970), 112.

¹⁸⁰ Journal of a Tour in the U. S. of A: 1794-1795, ed. J. E. Strickland, with a facsimile ed. of William Strickland, Observations on the agriculture of the United States of America (1801) (New York: New York Historical Society, 1971), 231.

¹⁸¹ Strickland, Journal of a Tour in the U. S. of A: 1794-1795, 237-238.

¹⁸² Duc De La Rochefoucauld-Liancourt, *Journal de Voyage en Amérique et D'un Séjour A Philadelphie 1 Octobre 1794-18 Avril 1795*, intro et des notes par Jean Marchand (Baltimore: The Johns Hopkins Press, 1940), 117.

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Bartram, Jr. and his children, and described his visit as the highpoint of his American travels, writing:

I expected a gentleman; I found a poor peasant very badly dressed with a huge greatcoat much mended, a pair of country boots, and with rather crude though extremely pleasant manners. With him came his two sons, one 12 and the other 20, who carried spades with which they had been working. We all sat down around the fire and since I saw four botanists together with the rude customs of the countryside but with sufficient knowledge of their subject, I stayed on until nightfall, enjoying with this little family the best afternoon I had spent in America. ¹⁸³

Naturalists from home and abroad were frequent visitors to the Bartram collection. André Michaux first visited Bartram's Garden in June 1786. His initial impression, hastily written to a French correspondent, did not sound promising: "I cannot give you longer details on what I have gathered and seen in the Bartram garden. There is only one new and interesting tree: the Franklenia." Ultimately, Michaux found an active exchange of ideas and plants with the Bartrams to be mutually agreeable, and he returned to visit "chez Bartram" a number of times. Both he and his son François André Michaux became important contributors to the Bartram plant collection, an assisted in documenting the Bartrams' discoveries through their own botanic publications.

The American botanist, Henry Muhlenberg first traveled to the Bartrams' garden from Lancaster, Pennsylvania, in 1792, subsequently writing to William Bartram: "I have seen so many other curious Plants in Your Garden that I very much wish to be there oftener." A very active botanic correspondence ensued, with Bartram and Muhlenberg exchanging extremely long letters that puzzled out confusing aspects of literature on North American botany. One of Bartram's earliest letters to Muhlenberg in 1792 conveys his frustration with European authorities, particularly Linnaeus:

¹⁸³ "A Portuguese Naturalist in Philadelphia, 1799," ed. Robert C. Smith, *Pennsylvania Magazine of History and Biography* 78 (Jan. 1954): 80–83.

¹⁸⁴ André Michaux to [Charles Claude De La Billarderie, Comte D'Angiviller], June 11, 1786, French National Archives: IT OI 2113 A6, Paris, France.

¹⁸⁵ André Michaux, "Portions of the Journal of Andre Michaux, Botanist, written during his Travels in the United States and Canada, 1785-1796. With and Introduction and Explanatory Notes, by C. S. Sargent," *Proceedings of the American Philosophical Society* 26:129 (1889): 1–145.

¹⁸⁶ André Michaux, Flora Boreali-Americana: sistens caracteres plantarum quas in America septentrionali collegit et detexit Andreas Michaux, 2 vols. (Paris, 1803); François André Michaux, Histoire des Arbres Forestiers de L'Amérique Septentrionale, 3 vols. (Paris, 1810-1813); The North American Sylva, translated from the French, 3 vols. (Paris; C. D'Hautel, 1819).

¹⁸⁷ Henry Muhlenberg to William Bartram, June 22, 1792, Torrey-Redfield Collection, Harvard University, Cambridge, Massachusetts.

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Notwithstanding the excellent System, invented & establish't by Linnaeus; and the industry & labours of that celebrated Naturalist in correcting & reforming Botany, there still remains much confusion & error, particularly in regard to the Vegetables of America, arising from a disagreement betwixt European & American Botanests...I must observe, that In my opinion that most valuable part of Linnaeus' botanical work, namely the Synonymae of the Spec. plantarum is the cause of not a little confusion...Perhaps my Frie^d will be almost rous'd to say, 'This is a bold criticism' ¹⁸⁸

Thomas Jefferson's first recorded trip to Bartram's Garden occurred in January 1783, although it is quite likely that he visited earlier. He requested seeds from the Bartrams on several occasions while posted in Paris as the American minister, and again on his return to the United States. Jefferson maintained a sporadic correspondence with William Bartram, which probably under-represents their friendship and his interest in the garden, and recognized Bartram as an authority on North American plants. Few of Jefferson's visits to Bartram's Garden were well-documented, although he spent the summer of 1793 in a nearby house on the east bank of the Schuylkill, "in sight both Bartram's and Gray's gardens." Jefferson recommended "Mr. Bartram" to Louis, Prince of Parma, in 1797 as:

the owner and keeper of a Botanical garden in the neighborhood of this city, who provides and furnishes with great skill and at moderate prices such trees and shrubs of this country as the curious call for, and packs them so carefully as to preserve their vegetable powers through any length of voyage. ¹⁹¹

William Bartram had a long and close relation ship with Benjamin Smith Barton the first professor of natural history at the University of Pennsylvania. William was acquainted with the young Barton as a student before he left to study medicine at Edinburgh in the summer or 1786. Barton had a practice of querying Bartram in detail on any number of topics of natural history. This exchange continued during Barton's studies in Europe and again on his return to Philadelphia in 1789, and much of the material Barton received from William Bartram ultimately found its way into his publication. Although he frequently credited Bartram as the source of ideas and information, some contemporaries believed that Barton relied too heavily on his knowledge. Barton brought his classes in Botany and *materia medica* to Bartram's Garden to study, and William Bartram expressed pride in his educational role, writing in the preface to the 1807 Bartram *Catalogue* that the family garden:

¹⁸⁸ William Bartram to Henry Muhlenberg, September 8, 1792, Muhlenberg Correspondence, 21, HSP.

¹⁸⁹ Jefferson's Memorandum Books, Accounts, with Legal Records and Miscellany, 1767–1826, The Papers of Thomas Jefferson Second Series, vol. 1., ed. James A. Bear, Jr. and Lucia C. Stanton (Princeton: Princeton University Press, 1997), 526.

¹⁹⁰ Thomas Jefferson to Martha Jefferson Randolph, May 26, 1793, *The Papers of Thomas Jefferson*, vol. 26, (Princeton, NJ: Princeton University Press, 1995), 122.

¹⁹¹ Thomas Jefferson to Prince Louis of Parma, May 23, 1797, *The Papers of Thomas Jefferson*, vol. 29, ed. Barbra B. Oberg (Princeton: Princeton University Press, 2002), 389-392.

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may with propriety and truth be called the *Botanical Academy of Pennsylvania*, since, being near Philadelphia, the Professors of Botany, Chemistry, and Materia Medica, attended by their youthful train of pupils, annually assemble here during the Floral season. ¹⁹²

Inevitably, intellectual and educational interest in the garden led to continued and expanded exchange in plants, supporting the garden's second role as a commercial nursery. New exotics were introduced to the Bartram collection in this manner. André Michaux contributed a Silk Tree, *Albizia julibrissin*, and its seeds were later passed on to Thomas Jefferson in the autumn of 1808. Dr. Alexander Anderson, superintendent of the Royal Botanic Garden on St. Vincent, sent plants of Green and Bohea Tea to the Bartrams around 1789. While not the earliest introduction of tea to North America, these were the first tea plants in Philadelphia, and the Bartrams sold many to the gardens and nurseries in the city, including William Hamilton at The Woodlands, Charles Willson Peale, and Henry Pratt at Lemon Hill. 193

Although not well documented, it is probable the Bartram brothers constructed a large greenhouse ca. 1790, as William Bartram mentioned a greenhouse several times in his correspondence with Henry Muhlenberg. ¹⁹⁴ In the winter of 1789-1790, John Bartram, Jr. sent a collection of plants to William Hamilton for wintering at The Woodlands, suggesting repairs or new construction to the plant house or houses at Bartram's Garden. ¹⁹⁵ The 1807 *Catalogue* of the Bartram collection refers to "green houses" in plural, and over 75 species of native and exotic greenhouse plants are listed, including Aloes, Citrus trees, Fuchsia, Gardenia, Oleander, and species of Amaryllis, Daphne, Jasmine, Cactus, and Pelargonium. ¹⁹⁶

Greenhouse plants became profitable as the local market grew. Large greenhouses or greenhouse-hothouse combinations became an important feature of several Philadelphia gardens in the late-eighteenth century. Some of these are recorded in the Federal Direct Tax surveys taken in the summer of 1799. These surviving survey schedules are not complete, but greenhouses were recorded at Lansdowne, occupied by William Bingham, at The Woodlands, at Gray's Ferry, at Henry Pratt's Lemon Hill, at Thomas. Giese and Samuel Breck's houses north of

¹⁹² [William Bartram], A Catalogue of Trees, Shrubs, and Herbaceous Plants, Indigenous to the United States of America; Cultivated and Disposed of By John Bartram & Son, At their Botanical Garden, Kingsess, near Philadelphia (Philadelphia, 1807), 7.

¹⁹³ Charles Boewe, "Introduction of Tea Plant at Bartram's Garden," *Bartram Broadside* (Fall 1994): 10–12; Robert Carr to C. S. Rafinesque, September 15, 1819, printed in the *Western Monitor* (Lexington, Kentucky), October 5, 1819.

¹⁹⁴ William Bartram to Henry Muhlenberg, September 8, 1792, Muhlenberg Letters: 21, HSP.

¹⁹⁵ William Hamilton to his private secretary [Benjamin Hays Smith], June 1790 and June 12, 1790, Benjamin H. Smith, "Some Letters From William Hamilton Of The Woodlands To His Private Secretary," *Pennsylvania Magazine of History and Biography* 29 (1905): 159, 258-259.

¹⁹⁶ Joel T. Fry, "Plants For Winter's Diversion," Greenhouse History and Greenhouse Plants at Historic Bartram's Garden. (Philadlephia, PA: The John Bartram Association, 1995).

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the city along the Delaware, at Thomas Forrest's house in Germantown, and at James Logan's Second Street town house. William Hamilton's 65' x 24' greenhouse and 33' x 36' hothouse at The Woodlands was by far the largest example in the area, and rivaled large planthouses in Europe. Although the Direct Tax records survive for Bartram's Garden, no greenhouse was recorded in the surveys. If John and William Bartram did construct a new greenhouse between 1790 and 1800, it may have been a combination greenhouse and orange house measuring 65' x 30', inventoried in 1837. 197

Although not mentioning a greenhouse, the Federal Direct Tax assessments taken in the summer of 1799 do provide details about some of the outbuildings then in existence at the garden. Kingsessing was included in the "Fourth District" survey of Philadelphia County, and the assessment was apparently taken twice. John Bartram, Jr. was initially assessed for one dwelling-house and five outbuildings, located on a one-acre lot and valued at \$1,400, and 141 acres of land, valued at \$5,290. The resurvey listed one house with a 48' x 24' footprint and six outbuildings valued at \$1,575, and 141 acres assessed at \$5,290. The six outbuildings were itemized as follows:¹⁹⁸

1 stone granary 12' x 12'

1 stone and frame shed 10' x 72'

1 barn 36' x 21'

1 frame hay house 24' x 16'

1 frame house 12' x 15'

1 frame shed 21' x 12'

While the brothers John and William Bartram were together operating a successful botanic garden and nursery, John also continued farming, an occupation in which he was engaged from at least 1771. Tax records for Kingsessing Township survive as a fairly complete set spanning from 1780 to 1815. John Bartram, Jr. was listed as a "farmer" in 1780, 1781, 1782 and 1783, while from 1785 to 1812 he was described as a "botanist." William Bartram, who was recorded in the assessments irregularly, was not listed as a "botanist" until 1796. The Bartram neighbor, William Young, onetime "Queen's Botanist" was also taxed as a "botanist" in 1781 and 1782. The major part of John Bartram, Jr's taxable estate was 140 (or more) acres of land. Livestock

¹⁹⁷ Philadelphia County Direct Tax, 1st—5th Assessment Districts, ca. summer 1799, M-372, microfilm reels #1-5, U. S. National Archives and Records Administration, Mid-Atlantic Region, Philadelphia, Pennsylvania; Alexander Gordon, "Bartram Botanic Garden," *The Genesee Farmer* 7 (Jul. 15, 1837): 220.

¹⁹⁸ Philadelphia County Direct Tax, 1st—5th Assessment Districts.

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on the farm fluctuated somewhat, but on average there were three horses and seven cattle. Sheep were probably also present, but were only included in two assessments, so it is impossible to calculate a reliable statistic. 199

John Bartram, Jr.'s assessments describe both upland and meadow land beginning in 1785. He was taxed for 13 acres of meadow, while the remainder of the farm was upland. This valuable meadow land was part of the large areas of open marsh lands in Kingsessing on the west bank of the Schuylkill that were drained and maintained as extremely lush grazing lands. The diking and draining of these marshes had a long history probably extending back into the seventeenth century. Crèvecoeur's account of his visit to John Bartram, Sr. in the 1760s described the senior Bartram supervising a group working at repairing the meadow dikes and drains. ²⁰⁰ By the late-eighteenth century some farmers in Kingsessing came to concentrate on raising cattle alone—probably beef cattle for the Philadelphia market—on these meadow lands, and they were indicated as "graziers," rather than *Farmers* in the tax assessments. John Bartram, Jr. never made this change, but apparently used his meadow share to maintain a smaller number of dairy cattle. In 1799, his nephew, James Bartram, Jr. (1761–1838), took over management of the Bartram farm north of the garden site from his father James, and began a career as grazier. James Bartram, Jr. was assessed yearly for a herd of between twenty and thirty cattle and oxen.

Tax assessments can be used to compare the Bartram family to the rest of Kingsessing's population. John Bartram, Jr. lived in a "good stone house" and had a "stone barn" built in 1775. As of 1796 there were only ten stone houses recorded in Kingsessing, and in 1797 there were only four stone barns; John's brother James Bartram also had a stone house and barn. In 1787, there were only nine individuals in the township who had a higher total assessment. John Bartram, Jr. was taxed for a "chair, chaise, or carriage" between 1780 and 1795, which was a two-wheeled horse-drawn carriage. In a typical year there were only eight carriages listed for the township, and the Bartram vehicle was assessed above the mean. John Bartram, Jr. was not taxed for servants or slaves, although both bound servants and slaves were held by neighbors. A sequence of gardeners recorded in the Kingsessing tax assessments could have been employed in the Bartram Garden or at The Woodlands in adjacent Blockley Township, although this can only be inferred without other evidence. While not the largest landholder in Kingsessing, John Bartram Jr. was a successful farmer and businessman, and possessed a house and personal property placing him among the ten wealthiest citizens in that township.

There is a sense of tragedy that surrounds the second generation at Bartram's Garden. John Bartram, Jr.'s wife, Elizah Howell Bartram (1751–1784) died young, just over a year after the birth of James, her sixth child. John and his brother William were left to raise four small

¹⁹⁹ Kingsessing Township Tax Assessments, 1780–1794, vol. TX44; 1795–1806, vol. TX45; 1807–1815, vol. TX46, Philadelphia City Archives, as transcribed in Joel T. Fry, "The 'Barn' At Bartram's Garden, An Historic Structures Report." 1992, Philadelphia, Pennsylvania, appendix A, JBBSCL.

²⁰⁰ Crèvecoeur 1782: 188, 190, 192-193.

²⁰¹ These gardeners could also have been employed at the Gray's Ferry garden.

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children. Understanding the fate of the garden as John Bartram, Jr. reached old age requires some background on his surviving children. John, Jr. and his wife Elizah had six children, four of whom survived to adulthood:

Mary Bartram (1773–1851), married Nathan Jones (1770–1834), on September 11, 1794. Ann M. Bartram (1779–1858), married Robert Carr (1778–1866), on March 4, 1809. John Bartram, III (1781–1804), never married.

James Howell Bartram (1783–1818), married Mary Ann Joyce (1792–1876), on August 18, 1810.

Available sources focusing on the Garden during this period are quiet as to William Bartram's role. He is not mentioned in official land records, nor in his brother's 1809 will. Alexander Wilson added a conclusion to the contemporary account of John Bartram Sr. in *The Cyclopaedia* (1807), noting that the garden was "at present chiefly under the superintendence of another son, Mr. William Bartram, well known in the literary world by his Travels." Although not credited as such, William Bartram was also clearly the author of the 1807 *Catalogue* of the Garden collection.

An increased concentration on the family garden and plant nursery at the beginning of the nineteenth century may have accompanied a decline in farming. Beginning in 1795 there was a steady decrease in the number of cattle on the farm. John Bartram, Jr. retired from active farm business ca. 1799, and turned his farm over to his son-in-law Nathan Jones. From 1802 through 1810 Nathan Jones was assessed for the land, livestock, and buildings of the Bartram farm. He added two frame "tenements" to the farm, and active farming was turned over to a series of tenants.

Family tradition indicates John Bartram, III assisted his father in running the botanic garden until his untimely death in 1804. Sometime between 1801 and 1803, John III partnered with Nathan Jones, his sister's husband, for operation of the Bartram family farm. John Bartram III only appeared once in the tax lists, in 1803, when he was assessed a simple per head charge for his personal estate. William Bartram recorded feelings about his early death at twenty-three in a letter to his friend Dr. Benjamin Smith Barton, dated March 7, 1804:

Knowing Your regard for our Family & particularly For the Young Man My Nephew John, he is deceased...Cut off torn from his disconsolate Father by the

²⁰² [William Bartram], "Bartram, John," *The Cyclopaedia, or, Universal Dictionary of Arts, Sciences, and Literature*, vol. 4, (Philadelphia, 1807). In 1807, the American edition of Rees' *Cyclopaedia* was under the editorship of Alexander Wilson, a close friend of William Bartram. See Alexander Wilson to William Bartram, May 22, 1807, forwarding the first part of vol. 4 of the "Am. Cyclopaedia," in *The Life and Letters of Alexander Wilson*, ed. Clark Hunter (Philadelphia: American Philosophical Society, 1983), 263.

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grim <u>Herculean Enemy of the Human Race Ardent Spirits</u>...James Bartram...is under the necessity of leaving you, at least for a time, to assist in relieving his Parent now almost sinking under the weight of grief's paternal sensibility.²⁰³

As mentioned in William Bartram's letter, James Howell Bartram was studying medicine under Dr. Benjamin Smith Barton at the University of Pennsylvania, beginning 1801, but was forced to leave upon his brother's death. In September 1804, he left Philadelphia as ship's surgeon on a voyage to the Cape of Good Hope and Batavia. ²⁰⁴ He returned to Philadelphia in 1805 and apparently began practicing medicine locally while also, in 1807, entering into a partnership with his father for directing the operations at the family botanic garden. The 1807 *Catalogue* is headed "John Bartram & Son" and the introduction concludes:

Finding old age coming on, he has lately associated his son with him in the concern and hopes by their united exertions, the gardens will continue to be worthy of the attention of the lovers of science and the admirers of nature. ²⁰⁵

This new edition of the *Catalogue* was probably intended to launch the new business arrangements. These plans were ill-fated on account of a federal embargo on all foreign trade made in response to Europe's Napoleonic Wars, policies that effectively crippled the Bartrams' business. Although, the embargo was lifted in 1809, disruptions related to the European wars continued, and eventually drew the United States into the War of 1812. The American economy was in a state of collapse until at least 1815, and the botanic garden maintained few local or international customers. James H. Bartram appeared in assessments beginning in 1806 after his return from Batavia, and his listed occupation likely reflects the worsening business climate. Only in 1807 was James H. Bartram listed as a "botanist" on the Kingsessing tax registers, being described as a "doctor" in 1806, and from 1808 to 1810, and from 1811 onward, after his marriage, as a "farmer."

Nathan Jones, who had control of the Bartram farm for the first decade of the nineteenth century, operated a grist mill, saw mill, and possibly a snuff mill on the west bank of the Schuylkill at the mouth of Mill Creek in Blockley Township, just to the south of The Woodlands. One of his mills was constructed with money loaned by his father-in-law, John Bartram, Jr. Nathan Jones appears in the Blockley tax ledgers as a miller and farmer beginning in 1792. By 1814, the mills were sold or leased to Jacob Mayland, and Jones began a political career. He served as Justice of the Peace for a number of years, from at least 1809. Because of a later dispute over the settlement and division of John Bartram, Jr.'s estate, and particularly over Nathan Jones' debts to the estate, detailed accounts and court testimony survive to record the

²⁰³ William Bartram to B. S. Barton, March 7, 1804, Barton-Delafield Collection, APS.

²⁰⁴ James Howell Bartram, "Remarks and Observations on A Passage to the C. of Good H., Batavia, Madras, Calcutta, &c., &c., by James Bartram, Surgeon, A. D. 1804 & 1805," JBBSCL, printed in facsimile with biographical sketch by Joel T. Fry, (Philadelphia: The John Bartram Association, 1991).

²⁰⁵ [William Bartram], A Catalogue of Trees, Shrubs, and Herbaceous Plants (1807), 7.

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period during which Jones controlled the farm. In 1822, depositions were taken from Bartram family members, friends, and neighbors about conditions on the estate in the period from 1798 to 1812.²⁰⁶

Testifying in 1822, John Frederick Gaul, tenant on the Bartram farm ca. 1798-1799, recalled that it was:

[a] Poor stake of farm. The last harvest I made was a^{bt.} 5 bushels of grain to the acre. Left this farm because I could do nothing with it: it would not pay me—and because Bartram said he was incapable of managing it & that he gave it up to Jones to take care of for him...I had 6 or 7 fields, almost all the fields on the place.²⁰⁷

John Bartram, Jr.'s tax assessment subsequently listed a Frederick Schutz as a tenant in 1799-1800, and from 1800 onward, the registers recorded Peter Holstein as a tenant. Holstein also gave evidence in 1822:

John Bartram, J^{ur.} was a partner of Jones. B^{trm}, had told me so, This however did not last quite 2 yrs.—Don't know how long—...Remember Jones had several hands to tussock the meadow in the winter—...There had been many hedges & brush &t,—Hedges very wide—...Jones when I lived there had 12 or 13 Milch cows, 2 horses, not often oxen, 6 hogs, fowls not many, 1 or 2 carts, Dairy tubs, ploughs & harrows, &c.—abt. as good Stock as farmers generally—²⁰⁸

In addition to tenant farmers, testimony of family and neighbors agreed that conditions on the farm deteriorated under Nathan Jones' control. Ann B. Carr was examined at length, and stated in 1822:

When J[ones] took the farm it was stocked—more than 2 horses, 3 or 4—We usually had 7 or 8 cows on the farm—There were hogs when he took it—There was a chair—wagons—carts—perhaps 2—farmers utensils, ploughs, &t...The farm was in pretty good State when J. took it. The neighbours Said So at least. It was in a very bad State when he left it: at least the meadows were. They were pretty much overflowed, banks very bad; been so for several years...Father's garden very productive & valuable till the embargo—after embargo raised, better, but did not regain its former value...Produce of garden not Sufficient to bear exp^{s.} of family—at least not after Emb^{o.} Can't Say how it was before.

Her cousin, James Bartram, Jr. also described the deterioration of the farm in the same year, particularly the meadow land, stating:

²⁰⁶ John Bartram, Jr. Estate Papers 1796–1822, APS.

²⁰⁷ John Frederick Gaul testimony, June 19, 1822, John Bartram, Jr. Estate Papers 1796–1822, APS.

²⁰⁸ Peter Holstein testimony, June 10, 1822, John Bartram, Jr. Estate Papers 1796–1822, APS.

²⁰⁹ Ann B. Carr testimony, July 30, 1822, John Bartram, Jr. Estate Papers 1796–1822, APS.

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The farm was a great deal worse when Jones left it than when he took it. It had been in good order. Some part of the meadow was pretty good when Jones took it & when he left it, it was actually a frogpond...I believe the garden & seed business was more valuable before 1800 than since...The business of the garden was carried on till his decease from 1795 till his death—He was capable of attending to his business (the garden) till the winter before his death...William B. did his writing & afterwards Colonel Carr.

Recorded proceedings related to John Bartram, Jr.'s estate also suggests that he entered a period of personal deterioration during the last years of his life, following his son John's death and a general decline in trade. Samuel Gibson, a neighbor to the south of the garden, recalled: "I guess the primary reason of Jones taking charge of Bartram Est. was B. not able to take care himself. He was addicted to drink." Edward Garrigues, an overseer of the local Quaker Meeting, similarly claimed that John Bartram, Jr. "was not a temperate man at the close of life, irregular in his habits at least [during his] last 6 years...[he] was chiefly intox^{d.} in afternoons." The apparent decline in the family's vitality and economic instability of the early-nineteenth century challenged the survival of the garden both as a place of botanic study and as a viable commercial nursery.

The Third Generation: Ann and Robert Carr

The marriage of Ann Bartram to Robert Carr in 1809, and the marriage of James H. Bartram to Mary Ann Joyce in 1810 brought a measure of stability and revitalization to the Bartram family. The farm was placed under the control of the two newly married husbands, and the botanic garden continued on under direction provided largely by William Bartram and his niece Ann B. Carr. In December 1809, Robert Carr and James H. Bartram signed an agreement with

²¹⁰ James Bartram, Jr. testimony, June 12, 1822, John Bartram, Jr. Estate Papers 1796–1822, APS.

²¹¹ Samuel Gibson testimony, June 10, 1822, John Bartram, Jr. Estate Papers 1796–1822, APS.

²¹² Edward Garrigues testimony, July 12, 1822, John Bartram, Jr. Estate Papers 1796–1822. The same Edward Garrigues visited Ann B. Carr as overseer when she was disowned for marrying, and was remembered as "not intimate in our family." See Ann B. Carr testimony, July 30, 1822, APS.

²¹³ The surviving marriage certificate of James H. Bartram and Mary Ann Joyce (located at the HSP) indicates Nathan Jones officiated at the ceremony as Justice of the Peace, but of the numerous witnesses signing the certificate, only Nathan Jones, Robert Carr, and Ann Carr represented the Bartram family, perhaps indicating some dispute or dissatisfaction with the marriage. Bartram family problems, ca. 1800–1814, were transformed into an apocryphal story concerning Alexander Wilson, Ann (Nancy) Bartram, and Robert Carr that appeared under the title "A Romance of Bartram's Garden," *Philadelphia Sunday Press* May 9, 1896. The fictionalized story was supposedly based on an interview with William Middleton Bartram (1838–1916), a grandson of James H. Bartram. The story insinuates that Alexander Wilson was in love with Ann Bartram, but her father opposed the marriage and forced Ann to marry Robert Carr, a "well-to-do printer," against her wishes. James H. Bartram cursed Carr for the forced marriage and refused to ever speak to him. This runs counter to all available documentary evidence; the Carr's marriage certificate was signed by the entire Bartram family, including James H. Bartram.

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John Bartram, Jr. allowing them to occupy most of the Bartram farm for the next five years. ²¹⁴ In exchange for maintaining the fields, banks, and meadows, and the family cows, and paying all taxes, Carr and James H. Bartram kept all of the farm's produce. The following year after his marriage, James H. Bartram settled on a forty-eight-acre portion of the 140+ acre farm, occupying a frame tenant houses built by Nathan Jones in 1799 This tract was located at the northwest corner of the farm, bordering on the Darby Road, with the house located at the present intersection of 54th Street and Woodland Avenue. The remaining farm acreage, the nursery garden, and the comfortable stone house built by John Bartram, Sr. became Robert Carr's financial responsibility.

Alexander Wilson, living at the Bartram farm during the summer of 1811, confirmed that Carr was actively farming his portion of the Bartram tract in a July letter to Philadelphian George Ord, stating: "my friend Major Carr, the bearer of this, is desirous of conversing with you on the subject of Hemp, of which he has at present a large & very promising field." Testimony during the settlement of John Bartram, Jr.'s estate indicates that Carr invested a great deal in repairing and improving the property, particularly the Schuylkill meadows flanking the garden, which "had been wasted completely; so that Carr put \$750 of repairs on it." In addition to these physical improvements, ca. 1810 Carr also began advertising the Bartram plant and seed business in the *Aurora* and other local newspapers.

This print initiative stemmed from Robert Carr's established profession as a printer. Immigrating to Philadelphia from Ireland at a young age, in 1792 Carr was apprenticed to Benjamin Franklin Bache, a grandson of Benjamin Franklin, at his printshop and type foundry at Franklin Court. In 1801, Carr established his own printing business and soon had a reputation for fine printing. Carr's shop produced the American edition of Abraham Rees' *Cyclopaedia* (1805 and after), Gibbon's *Decline and Fall of the Roman Empire* (1804-1805), Thomas Moore's *Epistles*, *Odes*, and *Other Poems* (1806), and particularly, Alexander Wilson's *American Ornithology* (1808-1814), printed for the firm of Bradford & Inskeep. In 1811, William Duane wrote to Thomas Jefferson from Philadelphia, describing Carr as "the best printer in this city." Carr met Ann Bartram during production of Wilson's *American Ornithology*. Ann, trained as an artist under her uncle William Bartram, assisted in the preparation of a set of master colored

²¹⁴ John Bartram, Jr. Estate Papers 1796-1822, APS.

²¹⁵Alexander Wilson to George Ord, July 9, 1811, *The Life and Letters of Alexander Wilson*, 388.

²¹⁶ Francis E. Brewster arguments, August 30, 1822, John Bartram, Jr. Estate Papers 1796-1822, APS.

²¹⁷ William Bartram Snyder, "Biographical Sketch of Colonel Robert Carr," December 10, 1866, 1–7, Appendix A, HSP; also, Robert Carr, "Personal Recollections of Benjamin Franklin," *The Historical Magazine*, 2nd series, 4 (Aug. 1868): 59-60. Bache had learned fine printing in Paris while there with his grandfather.

²¹⁸ "Letters of William Duane," ed. Worthington C. Ford, *Proceedings of the Massachusetts Historical Society*, 2nd series, 20 (May 1906): 344.

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plates for the multivolume work, which Robert Carr and his brother William printed.²¹⁹ Although Carr had been active in farming, property divisions occurring after John Bartram, Jr.'s death encouraged the Carrs full immersion into the commercial plant business.

John Bartram, Jr. wrote his will in November 1809, and in spite of difficulties already manifest among his surviving children, Mary Jones, Ann Carr, and James H. Bartram, and their spouses, he apparently intended the property of roughly 140 acres to be held in common. He died on November 16, 1812, and Robert Carr, Nathan Jones, and James H. Bartram were all named as executors of the estate, unfortunately the wartime state of the nation prevented its immediate settlement. Robert Carr was a Major in the 16th Regiment, United States Infantry, and later promoted to Lieutenant Colonel of the 15th Regiment; he was not discharged from service until May 1815.²²¹

By late December 1814 the John Bartram Jr. heirs were able to lodge a series of partition deeds splitting the acreage held in common into three tracts, largely following the divisions in practical, if not legal, observance since 1810. Ann and Robert Carr received the original Bartram house, botanic garden, and nursery, and the north meadow land, a total of thirty-two acres that are roughly the bounds preserved in the current Bartram's Garden park. Mary and Nathan Jones took possession of the southern third of the farm, sixty-seven acres, including the southern meadow ground. The farm's northwestern third, about fifty mostly wooded acres, went to James H. Bartram; he resided there until his 1818 death. ²²² As part of the division, Robert and Ann Carr also came into ownership of "384 pots, boxes and tubs of plants" valued at two-hundred fifty dollars, undoubtedly the plant stock at the garden at the time of John Bartram, Jr.'s inventory. The shad fishery on the Schuylkill associated with the garden was also divided into thirds; in 1817, James H. Bartram sold his third to Mary Jones and Robert Carr for two-hundred dollars. ²²³

Documentary evidence indicates that the division of the Bartram property in 1814 was not completely amicable. On source of friction that likely impacted sentiment about the property's division was the less than amicable relationship between Robert Carr and Nathan Jones. In a January 1819 letter to Samuel Breck, a resident of adjacent Blockley Township and a state senator, Carr asked for assistance with a petition for appointment as the justice of the peace in Blockley and Kingsessing townships, writing:

²¹⁹ The Life and Letters of Alexander Wilson 1983: 74, 82, 89.

²²⁰ Philadelphia County Register of Wills 1812: Will #127.

²²¹ Snyder, "Biographical Sketch of Colonel Robert Carr," 1866: 9, for ranks; Robert Carr "Journal and Letter Book, Etc," 1811–1823, MS volume, HSP, presented by W. Bartram Snyder, December 1866, for discharge.

²²² Philadelphia County Records, Deed Book MR-12-412; Kenyon et al. 1975: 9-10, map 5.

²²³ Deed, James H. Bartram to Mary Jones and Robert Carr, 1817, Philadelphia County Records, Deed Book MR-12-411.

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I have been requested not to forward this application through Nathan Jones, as he will, no doubt, as far as possible oppose any applicant, in hopes of having his commission renewed (unless he receives a higher station) which the respectable part of the community here are desirous to prevent as the commission of the Peace have gave him an undue influence amongst the lower class, which he exerted on every occasion which offered "to mortify the tories" as he expresses himself. In the opinion of those who best know Nathan he is as completely "up for sale" as any man in the community notwithstanding his boasted "disinterestedness & independence."

Both Carr and Nathan Jones were active in the "Republican" or Jeffersonian party and over time appear to have become bitter rivals. Jones effectively opposed Robert Carr's application for justice of the peace in 1819. One year later, Carr was elected to the state assembly for one term and ca. 1821 Nathan Jones also was elected to the legislature. Despite all of this political rivalry and maneuvering, Carr persevered and began a lengthy appointment as the justice of the peace for Kingsessing beginning in 1821, and one year later became Adjutant General of the Militia of Pennsylvania, serving at least through 1824. 225

Another complication in the moods and practical needs related to the division of John Bartram, Jr.'s estate involved the collapse of Robert Carr's printing business in 1813. During his active military duty during the War of 1812, Carr left the business in the hands of his brother, William Carr. They were forced into sudden bankruptcy late in 1813 with the failure of several large publishing houses who comprised their major clients, in particular Bradford & Inskeep and W. P. Farrand and Co. The collapse of international commerce during protracted conflicts on both sides of the Atlantic devastated nearly all sectors of American economic endeavor. This downturn came during the tedious and expensive production of Alexander Wilson's *American Ornithology*. Perhaps not coincidentally, Wilson died in Philadelphia on August 23, 1813, before completing the work's eighth volume. ²²⁶ Carr's brother William died in January 1815 of "a lingering illness of 18 months," believed to have been brought on by the strain of the business collapse. ²²⁷

For these events and other conditions, a massive amount of paperwork and legal posturing accompanied the Bartram estate's division. Following the deeds of partition, all of the participating parties made out deeds of trust to third parties, which prevented an easy sale of the divided properties. It is possible that the siblings and spouses executed the trust deeds in order to protect the estate from Robert Carr's creditors. With his printing business ruined, he

²²⁴ Carr, "Journal and Letter Book."

²²⁵ Carr, "Journal and Letter Book."

²²⁶ Vols. 8 and 9 of *American Ornithology* were issued posthumously in 1814, and edited by George Ord.

²²⁷ Carr, "Journal and Letter Book."

²²⁸ Various deeds of trust, Philadelphia County Records, Deed Book MR-10-638, GWR-32-259, and MR-12-414.

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returned from the war to begin a new career with his wife, Ann, as a horticulturist and nurseryman. Ann, alone of the Bartram children, wished to maintain the garden. Robert Carr might have preferred to sell or lease the garden property, but as he wrote in February 1819: "the advanced age of our uncle, Mr. W. B., who resides with us and who could not bear the thought of parting with the garden, forbids the idea of selling during his life."

It is generally concluded that Ann B. Carr inherited the "Bartram" botanic talent and she was tutored from a young age by her Uncle William in drawing and painting from nature. ²³⁰ A description of the garden in 1837 by Alexander Gordon also praised her accomplishments:

to speak in just terms respecting her enthusiasm for plants, (which is only equaled by her success in their cultivation) is a task I am incompetent to perform...the passionate fondness with which she toils among the plants, in every department, from the earliest dawn until darkness renders her operations impracticable...Her knowledge of American plants is most extensive, not surpassed, if equaled, by anyone in the United States.²³¹

The Bartram family continued to cultivate within the framework of the botanic garden and plantings left by John Bartram, but it is clear they also enlarged the garden and broadened and increased the collection of plants. As at the beginning of the century, this generation of the Bartram family issued printed catalogues of the botanic collection, which by the 1820s and 1830s documented more than 2000 species of native and exotic plants available for sale. ²³²

²²⁹ Carr, "Journal and Letter Book."

²³⁰ Snyder, "Biographical Sketch of Colonel Robert Carr," 1866: 22–23

²³¹ Gordon, "Bartram Botanic Garden," 220. Also reprinted in the *New York Farmer, and American Gardener's Magazine* 10 (Jul. 30, 1837): 352–353 and *The Horticultural Register and Gardener's Magazine* 3 (Aug. 1, 1837): 281–286.

Printed catalogues of the Bartram collection are known to exist for the years 1783, 1807, 1814, 1819, 1828, 1830, 1831, and 1836, but were probably issued in other years as well. [William Bartram], Catalogue of American Trees, Shrubs and Herbacious Plants, most of which are now growing, and produce ripe Seed in John Bartram's Garden, near Philadelphia. [Philadelphia, 1783]; [William Bartram], A Catalogue of Trees, Shrubs, and Herbaceous Plants, Indigenous to the United States of America; Cultivated and Disposed of By John Bartram & Son, At Their Botanical Garden, Kingsess, near Philadelphia. To Which is Added A Catalogue of Foreign Plants, Collected From Various Parts of the Globe (Philadelphia, 1807). This 1807 Catalogue was reprinted in its entirety in 1814 with common names added, and reprinted again with additions in 1819. Robert Carr, Periodical Catalogue of Fruit and Ornamental Trees and Shrubs; Greenhouse Plants, &c. Cultivated and For Sale at Bartram's Botanic Garden, Kingsessing (Philadelphia, 1828), reprinted with additions 1830; Periodical Catalogue of American Trees, Shrubs, Plants, and Seeds, Cultivated and for Sale at the Bartram Botanic Garden, Near Philadelphia (Philadelphia, 1831); Periodical Catalogue of Fruit and Ornamental Trees and Shrubs, Green-House Plants, &c, Cultivated and For Sale at the Bartram Botanic Garden, Kingsessing (Philadelphia, 1836). The 1831 catalogue of "American" varieties lists over 1,400 species for sale as plants or seeds in bulk.

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The Carrs sustained international business dealings in North American seeds and plants, but also increased the local trade in nursery stock, particularly fruit trees and grapes, and exotic plants. Managing and expanding the plant and nursery business required capital at a time when Carr was still in debt from his printing business. Samuel Breck described the garden in 1817:

September 3, 1817 In the afternoon we rode to Bartram's garden, now in the possession of a Mr. Carr who married old Bartram's daughter. This is a beautiful spot, and rather better kept than formerly. As a nursery of young plants, it is rising in consequence. Mr. Carr informed me that he had 6,000 plants in pot for sale. His forcing beds are fine, and enable him to take the first cucumbers to town, for which he obtained 50 cents each for the first 50 and 25 cents for the first hundred. In addition to this, he is now building a large greenhouse.²³³

Beginning in 1818, a number of mortgages were taken out on the garden in order to pay for enlargement and modernization of the facilities. These mortgages were generally renewed every seven years, but increased in number later in the active history of the nursery business. ²³⁴ In February 1819, Carr wrote that though he was:

in the possession of a property worth 20,000 dollars I find my situation far from being enviable, as from correct estimates of the last three years, I find that my income will not meet my expenses, notwithstanding the most increasing industry and rigid economy. ²³⁵

James H. Bartram died in April 1818 and Nathan Jones became administrator of his estate. According to the administration accounts, Robert Carr rented the estate for the balance of 1818 and 1819. In 1819, a twenty-five-acre section of James H. Bartram's estate was offered for sale by Nathan Jones as administrator under order of the Orphans Court for payment of debts. This twenty-five-acre piece was situated on the farm's northern boundary along a deep wooded creek valley, apparently still uncut forest in 1819. It was offered for sale in four-acre pieces and Robert Carr purchased one woodland parcel. 238

²³³ Samuel Breck, "The Diary of Samuel Breck, 1814–1822," ed. Nicholas B. Wainwright, *Pennsylvania Magazine of History and Biography* 102 (Oct. 1978): 491.

²³⁴ West Collection: Folder 9, 121.

²³⁵ Carr. "Journal and Letter Book."

²³⁶ Mary Ann Bartram, the widow of James Howell Bartram, soon remarried David Holland, a one-time gardener at the Bartram Botanic Garden. She brought suit against Nathan Jones and Robert Carr over the settlement of John Bartram, Jr's, estate in 1822 with John K. Kane as auditor. See John Bartram Estate Papers 1796–1822, APS.

²³⁷ Philadelphia County Register of Wills, 1818, Administration #100.

²³⁸ Nathan Jones Administrator of the Estate of James H. Bartram to Robert Carr, Deed to lot of land in Kingsessing Township, Sept. 27, 1819, and Survey Plat by John Gibson, June 16,1819, 25 Acre piece of woodland in Kingsessing Township, HSP.

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After 1819, there is little clear evidence of how farming was organized on the various pieces of John Bartram, Jr.'s original land. Nathan Jones may have overseen cultivation of both his own section and that of James H. Bartram, deceased, probably with one or more tenant farmers paying rent. Jones continued submitting administration accounts for James H. Bartram's estate through February 1824. A letter from Robert Carr to Nathan Jones dated March 7, 1823 deals with a pale fence and mentions someone named "Hansell," probably a tenant farmer. The letter suggests that Carr was maintaining fences between his and Nathan Jones's land. Nathan Jones died February 11, 1834 with no children, and again Robert Carr may have taken over management of a large part of the full 140-acre Bartram estate, but no documentation has yet been found to support this conjecture. As late as 1843, Carr acquired the deed to a six-acre piece of James H. Bartram's portion, from his widow Mary Ann Bartram Holland and her son James J. Bartram. At this point the Carrs held title to forty-two or forty-four acres of land.

Following William Bartram's 1823 death, care of the Bartram Botanic Garden rested in the hands of Ann and Robert Carr, and John Bartram Carr, (1804–1839), a surviving son from Robert Carr's first marriage, whose relatively short life represents a fourth generation of the Bartram family working at the garden. ²⁴¹ John B. Carr was probably trained by William Bartram as well, but details are lacking. As he grew to adulthood, he was surrounded by some of the most famous American naturalists of the day, including: Thomas Say—a cousin of the Bartrams, Thomas Nuttall, William Baldwin, William Darlington, W. P. C. Barton, John Torrey, Richard Harlan, Constantine Rafinesque, and John James Audubon. In 1829, Carr had attempted to secure his son a position as assistant botanist on a proposed polar expedition by the Navy Department. He described his son:

as a <u>practical</u> botanist it will be difficult to meet with his equal, and he has been reared from infancy, in this garden, under the instruction of Mr. William Bartram, the botanist, a naturalist. With the exception of Mr. Nuttall, perhaps there is none better acquainted with the plants of this country, and his knowledge of exotics is very general.²⁴²

Carr wrote that his son had the support of Dr. William Darlington, Thomas Nuttall, Steinhaur of Philadelphia, Schweinitz of Bethlehem, and probably Dr. W. P. C. Barton. ²⁴³ By the late 1820s, John B. Carr was essential to the operation of the Bartram garden. Rafinesque sought to send young Carr to Florida to collect in 1831, but his "father wanted him & could not send him upon my vague promises." ²⁴⁴ John B. Carr continued to assist his father and stepmother in

²³⁹ Carr, "Journal and Letter Book."

²⁴⁰ Philadelphia County Records, Deed Books RLL-5-65; RLL-54-507; GWC-41-361.

²⁴¹ Joel T. Fry, "John Bartram Carr: The Unknown Bartram," *Bartram Broadside* (Fall 1994): 1–9.

²⁴² Robert Carr to General T. D. Barnard, Jan. 23, 1829, and R. Carr to Secretary of the Navy, Jan. 23, 1829, both Chester County Historical Society, Chester County, Pennsylvania.

²⁴³ Ibid.

²⁴⁴ Constantine S. Rafinesque to John Torrey, January 2, 1832, APS.

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running the garden and nursery through the 1830s, but died prematurely on June 11, 1839 of "pulmonary consumption" at age thirty-four. Ann and Robert Carr were left without an heir to continue the family garden, but for the time being they remained there and continued operations with the assistance of paid workers.

Some evidence of the workforce employed at the garden during the first half of the nineteenth century is available from the manuscript census returns of the garden, and from a letter, presumed by Robert Carr, published in John Claudius Loudon's *Gardener's Magazine* in 1831.²⁴⁵ From the censuses of 1820, 1830, and 1840, a free black family is located at Bartram's Garden, probably working as household servants and gardeners. Carr's letter to Loudon indicates he employed a foreman, and looking for a new one, as well as "twelve to twenty men and boys nearly all the year...Some of my workmen have been with me fourteen or fifteen years." He also noted that the "American collection" remained "under my own care," likely meaning his immediate family including Ann and his son John. The letter concluded with Carr's observations on American versus European gardeners, and implied much of his workforce was European trained: "it is no less strange than true, that we have few or none of our natives gardeners. Even where brought up in our gardens, they almost invariably prefer the plough and farming-work, and have a strong dislike to weeding, &c. &c." 247

A letter penned in November 1831 by William Wynne, the new foreman at the Bartram Botanic Garden, published in the following year's volume of the *Gardener's Magazine* reported that the native garden contained 2000 species on six acres, and the fruit nursery and vineyard covered eight acres. Wynne's description of the seed exports indicates they had become a global business:

Indeed the most remarkable feature in this nursery, and that which renders it superior to most of its class, is the advantage of possessing large specimens of all the rare American trees and shrubs; which are not only highly ornamental, but likewise very valuable from the great quantities of seed they afford for exportation to London, Paris, Petersburgh, Calcutta, and several other parts of Europe, Asia, and Africa. This garden in the regular resort of the learned and scientific gentlemen of Philadelphia. ²⁴⁸

²⁴⁵ Fry, "Phase I Archaeological Survey of Bartram's Garden Public Courtyard Project," 1990: appendix B.

²⁴⁶ Robert Carr, "Letter from R. C. Near Philadelphia, July 10, 1831," *The Gardener's Magazine and Register of Rural and Domestic Improvement* 7 (Dec. 1831): 666-667.

²⁴⁷ Ibid.

²⁴⁸ William Wynne, "Some Account of the Nursery Gardens and the State of Horticulture in the Neighborhood of Philadelphia, with Remarks on the Subject of the Emigration of British Gardeners to the United States," *The Gardener's Magazine and Register of Rural and Domestic Improvement* 8 (Jun. 1832): 272.

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Wynne also echoed the difficulty of keeping trained gardeners in America: "Colonel Carr told me (with regret) that most of the European gardeners turned farmers soon after they came here. This speaks volumes. There are no American gardeners except amateurs." ²⁴⁹

Presumably the bulk of the Carr property was farmed in the 1820s and 1830s, possibly only for fodder and as pasture for draft animals, but also for experimental purposes. It is recorded that Carr grew cotton as an experiment in 1821, and a dozen pairs of stockings were woven from the "crop." Carr also experimented with rice, the opium poppy, castor oil, madder, and continued cultivation of a tobacco variety John Bartram had received from the Seneca, but it is likely that these agricultural experiments were conducted on a small scale.

A good description of the Carr garden at its peak is preserved in the report of a committee appointed by the Pennsylvania Horticultural Society in the summer of 1830 to visit gardens and nurseries in the vicinity of Philadelphia. Robert Carr, an early and very active member of the Society, proposed the establishment of the visiting committee. After their travels, the committee concluded "in reference to out door plants" that the Bartram Botanic Garden: "must necessarily stand unrivaled...From this nursery, many thousands of plants and seeds are exported every season to Europe and South America. It is computed that there are 2000 species of our native productions, contained in a space of six acres." The "exotic department" contained 900 varieties, with more than 800 camellia plants of 36 sorts. It went on: "the green and hot houses are 196 feet long, and much framing is in use." The fruit nursery was eight acres with plans to enlarge it to twelve, and contained a vast number of varieties, including 145 types of grapes, 113 types of apples, seventy-two types of pears, forty-five types of plums, thirty-nine types of peaches, etc., etc. Robert Carr was clearly pleased with the committee report on his garden. He reprinted the account of Bartram's Garden in its entirety in his 1831 *Catalogue* of North American plants, and used an extract from it for his spring 1832 advertisement.

Later in the decade, Alexander Gordon's visit in 1837 reveals that the nursery had grown to 12 acres, and there were ten specialized glass houses in the exotic department:²⁵²

		Length	Width
1.	Green house,	50'	30'
2.	Orange house, &c.	30'	15'

²⁵⁰ James Ronaldson to Mathew Carey, January 11, 1822, HSP; Snyder, "Biographical Sketch of Colonel Robert Carr," 1866: 24.

²⁴⁹ Ibid

²⁵¹ "Report of the Committee appointed by the Horticultural Society of Penn'a, For visiting the Nurseries and Gardens in the vicinity of Philadelphia—13th July, 1830," *The Register of Pennsylvania*, ed. Samuel Hazard, 7 (Feb. 12, 1831): 105-106. As well Bartram's, the committee reported on the nurseries of David & Cuthbert Landreth, Thomas Hibbert, Parker, A. D'Arras, John M'Arran, Mrs. M'Mahon, and Daniel Maupay.

²⁵² Gordon, "Bartram Botanic Garden," 1837: 220.

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3.	Geranium house,	65'	11' 6"
4.	Propagating house,	21' 6"	11' 10"
5.	Rose House,	49'	13' 6"
6.	New Holland and Stove,	68'	14'
7.	Geraniums, roses, &c.	26' 6"	10' 6"
8. & 9	O. Rose Pitts,	63'	7'
10.	Cactus house,	20'	8'

A few of these structures have been located at the garden as a result of archaeological work beginning in 1980.

Despite a rebound in business and an expansion in facilities in the 1820s and 1830s, the Bartram business model ultimately failed. As North American plants became more widely cultivated, they were no longer rare or interesting to the gardening world. The Bartram family had depended on an elite group of customers in Europe and America, who were now interested in different plants. While Ann and Robert Carr had greatly expanded the commercial nursery into fashionable plants and novelties, they faced strong competition in Philadelphia from a large number of new nurseries and gardens. Severe financial depression followed the Panic of 1837, and even before his son's death in 1839, Robert Carr was looking to sell or rent the garden. ²⁵³ Carr offered his business for sale a number of times without success. Through the 1840s much of the nursery and greenhouse collection were sold off.

In the summer of 1844, the garden opened as a summer pleasure garden with ice cream and refreshments, and again in 1845 with regular steamboat excursions every Monday, Wednesday, and Friday from the Delaware River wharves. ²⁵⁴ In early spring 1845, Robert Carr offered all his nursery stock and greenhouse plants for sale at reduced prices, "intending to decline the nursery business." ²⁵⁵ Two years later, the garden property was seized by the Philadelphia sheriff and sold at public sale on June 7, 1847. ²⁵⁶ The purchaser, Robert Smethurst, may have been a friend or agent of the Carrs for they retained possession after this sale and continued to sell off the remaining nursery stock. The garden was again publicly offered for sale in February 1849, upon application to either Carr or Smethurst. ²⁵⁷

²⁵⁴ Philadelphia Inquirer Jul. 2, 1844; Philadelphia Public Ledger Jul. 1, 1845.

²⁵³ Ibid.

²⁵⁵ Philadelphia Public Ledger Mar. 5, 1845.

²⁵⁶ Philadelphia North American May 28, 1847.

²⁵⁷ Philadelphia Public Ledger Nov. 4, 1848; Philadelphia North American Feb. 5, 1849.

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Facing bankruptcy in 1850, Robert Carr was forced to sell the garden at auction a second time. On April 10, 1850, he wrote William Darlington, editor of the *Memorials* volume of John Bartram's correspondence:

I regret to have to add that this place must now be sold.—My <u>poverty</u> but not <u>my</u> <u>will</u> consents. The business which supported this place so long (the cultivation of our native seeds and plants for Europe) has ceased to be worth attending to, and has been involving me in losses and debts for several years past. ²⁵⁸

The garden was offered by Thomas & Sons at their "Seventh Spring Sale" on April 18, 1850.²⁵⁹ Andrew M. Eastwick purchased the garden either at the auction or just before. He held a mortgage of \$6000 on the garden property dating from July 3, 1847, probably from the financing after the original sheriff's sale, and purchased the entire Carr portion of the property for \$15,500.²⁶⁰ Between 1850 and 1855, Eastwick also acquired Mary Jones' sixty-seven-acre share of John Bartram, Jr.'s property, and several other small parcels of neighboring lands, reconsolidating much of John Bartram's original farm tract.²⁶¹ At over seventy years of age, both Ann and Robert Carr were dispossessed of their home of many years, and a century of Bartram family care and elaboration of the botanic garden ceased.

Some years later, John Jay Smith, librarian for the Library Company and editor of *The Horticulturist* after Andrew Jackson Downing, reminisced on the fate of the Bartram Garden:

It was then the only example of various planting near us, and rich it was in trees and plants from far-off regions...The habits of the Bartrams, when I knew them were a continuance of the simplicity of preceding years. They still executed orders from Europe for seeds and plants, in a small way, but derived profit enough from the place for their moderate wants. I well remember the picking of the seeds of a fine redbud maple that stood, and probably still stands, near the old house, now not superseded in interest by the more pretentious mansion of the purchaser, Colonel Eastwick...From this garden dates horticulture in America. It should be carefully preserved forever. ²⁶²

²⁵⁸ Robert Carr to William Darlington, April 10, 1850, Darlington Papers, New York Historical Society, New York, New York. The late 1840s seem to have been hard on a number of historic American gardens. In autumn 1848, both the Prince family's "Linnaean Botanic Garden," in Flushing, New York, and the Landreth's old Philadelphia garden advertised that they were "selling off."

²⁵⁹ Philadelphia North American Apr. 2, 1850.

²⁶⁰ Philadelphia County Records, Deed Book GWC–41–361; Kenyon et al. 1975: 11; West Collection, folder 9, 104–105, 121.

²⁶¹ Philadelphia County Records, Deed Books GWC-41-359; GWC-90-380; TH-10-516.

²⁶² John Jay Smith, *Recollections of John Jay Smith Written by Himself. Edited by his daughter, Elizabeth P. Smith.* (Philadelphia: J. B. Lippincott, 1892), 275-276. The manuscript of Smith's "Recollections" was completed ca. 1872, and much was written 20 years earlier.

Andrew M. Eastwick

Andrew M. Eastwick and Joseph H. Harrison, his business partner, developed a new type of railroad engine in the years between 1835 and 1840, which became the standard model for most American freight locomotives throughout the rest of the nineteenth century. The prototype engine *Gowan & Marx*, completed in 1839, drew 101 loaded four-wheel cars from Reading to Philadelphia, on February 20, 1840, at the then unheard of speed of ten miles per hour. 263 Harrison & Eastwick of Philadelphia were selected by the Czar of Russia, along with William Winans of Baltimore, to provide the rolling stock for the new St. Petersburg to Moscow Railway. Eastwick spent six years in Russia and returned to Philadelphia in early 1850 a very wealthy man. 264 The sale of the Bartram property by the Carrs and other family members gave Eastwick the opportunity to consolidate a large estate near Philadelphia and erect a suitably impressive house. An ambitious young architect, Samuel Sloan, provided Eastwick with a palatial plan for a "Norman Villa," and Eastwick had the house built just southwest of the historic Bartram home. 265

While the new villa, "Bartram Hall," was being erected in 1851, the Eastwick family inhabited the old Bartram House. 266 Eastwick maintained the smaller house for family use and for the most part preserved the historic botanic garden as it remained when the Carrs vacated. Bartram Hall was sited on the large hill overlooking the southern meadows, just south of the historic garden. Today nothing remains of Bartram Hall beyond the graded site and foundations. The house burned May 29, 1896 and razed soon afterwards. 267 The complete plans and specifications for its construction as well as views of every elevation survive, as Sloan used the design as the centerpiece of his two volume work on architecture, *The Model Architect*, published in 1852. It was estimated the house cost \$50,000 to construct. 268

Soon after his purchase of the Bartram property, Eastwick needed to return to Russia. He made arrangements with Robert Buist, Philadelphia's best-known mid-nineteenth-century horticulturist, to provide a gardener for managing the new estate and surviving Bartram's Garden. Buist had recently moved his large nursery business to "Rosedale," located in Kingsessing to the southwest of Bartram's Garden. Buist provided Eastwick with Thomas

²⁶³ John H. White, Jr., *A History of The American Locomotive, Its Development: 1830–1880* (1968) (New York: Dover Publications, Inc., 1979): 287–296

²⁶⁴ Albert Parry, Whistler's Father (Indianapolis: Bobbs-Merrill, 1939), 90–96, 155–157, 286.

²⁶⁵ Philadelphia Times Feb. 28,1896; Mrs. Andrew M. Eastwick, Jr., "Bartram Hall," Publications of the Historical Society of Philadelphia 2:9 (1930): 209–213, read at a meeting of the HSP on Dec. 14, 1910. Harold N. Cooledge, Jr., Samuel Sloan: Architect of Philadelphia (Philadelphia: University of Pennsylvania Press, 1986), 21–24.

²⁶⁶ Eastwick, "Bartram Hall," 210.

²⁶⁷ Philadelphia Public Ledger May 30, 1896.

²⁶⁸ Gleason's Pictorial Drawing-Room Companion May 27, 1854: 378.

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Meehan, a young English gardener already in his employment for two years and then superintendent of his nurseries. Meehan was born in England of Irish descent. His father, Edward Meehan, was a well-known English gardener and Thomas was largely trained by his father, with this education augmented through a two year period of employment at the Royal Botanic Garden, Kew Gardens, under Sir William Hooker. Meehan arrived in Philadelphia in the spring of 1848 at age twenty-two. ²⁶⁹

Thomas Meehan recorded his earliest connection with Eastwick and Bartram's Garden in a letter to Charles Sargent in August 1895:

But my chief object in writing is to suggest that if you ever do become the historian you threaten to be, please do some justice to the memory of Andrew M. Eastwick. Eastwick and Harrison had the great contract to build railroads, Railroad locomotives, and everything from St. Petersburg to Moscow. I was 23 years of age, and was foreman to Robert Buist under a three year engagement as foreman to build up the new Rosedale Nurseries—Buist still carrying on in the city at 12th & Lombard Street. Eastwick had loaned John and Ann Bartram Carr, \$15,000, and it was turned over to Eastwick in default of the interest. Eastwick came back for a few weeks, to settle his family in Bartram's old house as a sort of summer residence, and was to go back for a year or so more to settle his Russian affairs. He told Buist he wanted some one who was at once a Landscape gardener, a botanist, a gardener, an engineer, and I don't know what, to take full charge of everything while he was away. Buist had a love for the garden. He promised Eastwick he would have such a man for him, certainly in ten days—the time Eastwick had to return. I helped to look for such a man. Neither of us could find him. On the 9th day we were in despair. Suddenly Buist said, Thomas I have thought perhaps you would like it." I replied "most certainly I would, Mr. Buist,—but I am under engagement with you for three years, and ten month have only gone yet. I never thought to break my contract no matter how much I might better myself." "Never mind," say he, "if you like it come, and I'll give you the letters. I care as much for those old gardens as Eastwick does.

I showed Eastwick letters from Sir W. Hooker Colonel Vernon Harcourt Dr. Broomfield and host of worthies. He wouldn't touch them "Mr. Buist's letter was enough for him." He only referred to my youthful appearance (for the little beard I have was late in coming), told a story about some Emperor of Russia whose embassador to some potentate had been returned with the message that a man had been expected and not a boy,—and that the Emperor sent a handsome Beard in a box back to the cantankerous Highness, and I took my place in Bartram two days after. He told me the only pleasure he had in life—a very poor son of a very poor widow—was to ride on the excursion steamer round the Schuylkill River bend to Bartram's garden on a Sunday afternoon,—that he thought it was paradise, and many a time he wished he might be some day rich enough to buy it. To own Bartram's garden was the only boyish wish he ever had. "and to think," he said, "that this boyish dream

²⁶⁹ S. Mendelson Meehan, "A Brief Sketch of the Life of Thomas Meehan," *Meehan's Monthly* 12 (Jan. 1902): 13–16; Stephanie Ginsberg Oberle, "The Influence of Thomas Meehan on Horticulture in the United States," *Germantown Crier* 49 (Spring 1999): 4–25.

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should be realized." Subsequently I said, "you will have fine shade for you house." "No," said he, "I don't want a solitary branch cut. I shall build on that shadeless hill (in the middle then of a field of corn) so that not a bush of this beloved old garden shall be disturbed. My dearest hope is that the garden shall be preserved for ever."—This house by the way—costing \$75,000, is now rotting away, without a tenant simply because of its shadelessness on this hill.²⁷⁰

Meehan joined the Eastwick household by mid-1850 as he appears in the manuscript census returns of July 1850 as "Thomas Mahan, laborer." It is probable that Meehan was in charge of major changes to the landscape of the Bartram Garden while it was transformed from a commercial nursery into the country retreat of a wealthy industrialist. In 1853, Meehan wrote that through the Eastwick ownership, the Bartram botanic garden was preserved intact and "unaltered," but this is almost certainly not the case. ²⁷¹ In the same year, R. Robinson Scott, editor of the *Philadelphia Florist*, commented on the state of the garden:

There was once a Botanic Garden in the vicinity of Philadelphia. It was created by the enthusiasm of a genuine naturalist, but it did not long survive its founder and director; it is no longer a botanic garden, but the residence of a wealthy merchant of Philadelphia, who has spent no pains or expense in modernising it; and now, with a splendid mansion, and neat lawn and gravel walks, it forms an attraction to the visitor more generally appreciated perhaps than John Bartram's garden, filled with botanic novelties and gems, little cared for by the mass, who look with more interest on a stately pile of masonry than on a rare tree or shrub.²⁷²

A more appreciative account of Eastwick and Meehan's changes appeared later in 1853:

it must be highly interesting to every citizen who prides himself on the lustre the name Bartram has shed on the scientific character of his country to learn with what care the present proprietor endeavors to preserve every memento that has reference to his illustrious predecessor. The alterations which have been made in the old garden in the shape of walks, retreats, groves, and flower gardens, have been effected without the removal or injury of a single tree. ²⁷³

The alterations to the garden under the direction of Thomas Meehan, ca. 1850–1852, appear to have included an elaborated path system, new tree and shrub plantings, formal flower beds edged in boxwood, and a number of garden ornaments such as statuary, urns, seats, and

²⁷⁰ Thomas Meehan to Charles Sprague Sargent, August 16, 1895, Arnold Arboretum, Harvard University, Cambridge, Massachusetts, typescript located in JBBSCL.

²⁷¹ Thomas Meehan, *The American Handbook of Ornamental Trees* (Philadelphia, PA: Lippincott, Grambo, & Co., 1853).

²⁷² R. Robinson Scott, "A Botanic Garden," *The Philadelphia Florist and Horticultural Journal* 1:12 (1853?): 365.

²⁷³ "Garden Memoranda," *The Florist and Horticultural Journal* 2 (1853): 117.

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fountains; a March 1879 inventory following Eastwick's death itemized these garden ornaments. The most elaborate landscaping probably took place around Bartram Hall, but changes also occurred in the historic garden, the exterior and exterior of the original Bartram House, and to the outbuildings still in use on the property. Eastwick erected a new tenant house to the northeast of the 1775 barn, on the land later occupied by the Warner Cement Company and now reclaimed as park's north meadow. It is probable that a number of nursery related outbuildings, greenhouses, hot and cold frames, et cetera, were razed as part of the garden's transformations. There was also probably an increase in the area given over to cut lawn. As recorded above, most or all of the historic trees in the botanic garden were preserved, but little if any of the Carrs' large nursery and vineyard survived.

During Meehan's employment by Eastwick, ca. 1851, he compiled notes on all the full grown trees in the Bartram collection and these specific notes. These notes, along with additional examples of trees not found in the Bartram garden, were formulated to create his volume, the *American Handbook of Ornamental Trees*, published in 1853 and dedicated "To the Memory of John Bartram, the Patriarch of American Arboriculture." Meehan's book emphasized the garden's primarily status, in the 1850s, as a collection of full-grown tree specimens from the eastern half of North America, with the smaller shrubs, herbaceous plants, and exotics once part of the Bartram Botanic Garden reduced in number or gone.

Thomas Meehan remained only shortly in the employ of Andrew Eastwick. By April 1852, he had taken a position as Caleb Cope's head gardener at "Springbrook" on the Delaware near Holmesburg, Philadelphia County. Cope, president of the Pennsylvania Horticultural Society, had one of the largest private gardens in all of North America, including more than eleven greenhouses. The Amazon water lily, *Victoria regia*, first flowered in America at Cope's garden, just before Meehan's employment there. ²⁷⁵ Following Meehan's departure from Bartram's Garden, there is little information about the alterations or additions to the landscape. Presumably a professional gardener and staff maintained the grounds over the three decades the Eastwick family lived there. There is evidence of large entertainments at the house and garden during this period, including a Civil War-era *fête champetre* given on the grounds to raise funds for the U. S. Sanitary Commission. ²⁷⁶ Eastwick may have encountered financial difficulties around the same time. A daughter-in-law writing in 1910 claimed Eastwick abandoned Bartram Hall and moved back into the smaller Bartram House during a period of "financial strain," but later

²⁷⁴ Marsha L. Glenn, "Historic Structure Report. The John Bartram House, 54th Street and Elmwood Ave., Philadelphia, Pa. 19143," 2 vols, Philadelphia: John M. Dickey, A.I.A., February 1, 1978, 6–7, 29–30, JBBSCL.

²⁷⁵ Justica, "Springbrook, Estate of Caleb Cope: A Visit to Springbrook, the Seat of the President of the Pennsylvania Horticultural Society–March 1849," *The Horticulturist* 3 (1849): 411; John Ellis, "Letter to A. J. Downing, Sept. 8, 1851," *The Horticulturist* 6 (1851): 460-463.

²⁷⁶ Isabella James, (Mrs. Thomas Potts James), *Account of the Bartram Garden, published in "The Horticulturist" in 1850. Revised and Corrected by the Author and now printed for the Central Fair in Aid of the U. S. Sanitary Commission. Sold at the Fête Champêtre held at Bartram for the same Object, May 18th, 1864.* Philadelphia, PA: C. Sherman, Son & Co., 1864.)

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returned to the larger mansion.²⁷⁷ Eastwick tried to arrange a sale of the Bartram House and Garden to the Pennsylvania Horticultural Society in this period of financial troubles, without success.²⁷⁸

Eastwick's fortunes must have revived, for his will and inventory indicate that he died, on February 8, 1879, a very wealthy man. For over a decade after his death, Eastwick's estate and the Bartram House and Garden remained in unsettled. His property was maintained in trust by the "Pennsylvania Company for Insurance on Lives and Granting Annuities," with the income directed to Lydia Ann, his wife, their minor children, and several other beneficiaries. Lydia possessed the right to sell, rent, or lease the property during her lifetime, as did the trust company.

Eastwick's estate inventory, dated March 19 and 31, 1879, provides itemized contents for six outbuildings, which can be roughly matched to surviving structures at the Bartram's Garden, as follows.²⁷⁹

"Barn near Tenant House"—probably the surviving 1775 barn at the garden. A Gothic masonry tenant house appears to the northeast of the outbuildings at the garden in historic photographs of the late-nineteenth and early-twentieth century, and in property atlases. Several smaller tenant houses were scattered elsewhere on the Eastwick estate and might have had associated barns. This inventoried barn housed "11 cows, 3 heifers, and a bull, steer, and calf, and a small quantity of straw and oats."

"Main Barn & Stable"—probably refers to two connected structures, the frame addition on the west end of the 1775 barn and the masonry stable which ran perpendicular to it along the west edge of the barnyard. These two structures housed eight horses divided into two groups of three and five, apiece. They also contained a large quantity of wood, fodder, grain, tools, a hay wagon, and an old cart.

"Coach House"—probably the large Coach House until recently known as the stable at the garden. This structure housed three wagons, a sleigh, harnesses, saddles, and a number of tools on the first floor and a ruined Russian carriage on the second floor along with tools and flower pots.

"Carpenter Shop"—possibly the northern half of the present Seed House including Room #3 and Room #4.

²⁷⁷ Eastwick, "Bartram Hall," 212.

²⁷⁸ Thomas Meehan to Charles S. Sargent, August 16, 1895, Arnold Arboretum, Harvard University, typescript in JBBSCL; *Philadelphia Public Ledger* May 30, 1896.

²⁷⁹ Register of Wills, Philadelphia County 1879: Will #178.

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"Engine House & Green House"—associated with the Eastwick mansion, this structure was located at the end of a drive along the river bank in the southern section of the present park. It was demolished by the early-twentieth century.

"Ice House"—possibly the pit below Room #3 of the "Seed House," but Bartram Hall also had an adjacent outbuilding, a large two-bay springhouse, that could have also stored ice.

Soon after Andrew Eastwick's death, ca. 1881, Charles S. Sargent, Professor of Arboriculture at Harvard and Director of the Arnold Arboretum, organized a group of Philadelphians to purchase the botanic garden from the Eastwick estate by subscription. The Philadelphia group probably included Eli K. Price, Clarence H. Clark, in addition to others. The executors of the Eastwick's estate withdrew from the negotiations, "believing they could make more by destroying its botanical associations, and turning the whole into building lots." ²⁸⁰

Throughout the following decade a long campaign was fought to ensure city control of the property, and at the same time the garden suffered neglect, vandalism, and the theft or collection of many of the surviving specimen plants. In the end, Thomas Meehan, the one-time gardener to Eastwick, is largely responsible for its preservation. After a successful career as a gardener, horticulturist, nurseryman, naturalist, writer, and editor, he entered into Philadelphia politics. In 1883, Meehan was elected to the city Common Council from Germantown, and he soon began a local movement aimed in establishing small neighborhood parks throughout the city.²⁸¹

Preservation as City Property: The Acquisition of Acreage

In 1884, Thomas Meehan sponsored a successful ordinance that empowered the city to condemn land desired for "public squares" with the value assessed by a public jury. It is through this ordinance that the city acquired the Bartram Garden property. A city ordinance passed in July 1888 placed Bartram's Garden and four other small parks on the city plan, indicating the city's intention to purchase this land and prevent development of the acreage. These were the first parks designated under Meehan's ordinance. Charles Sargent provided broader national coverage for the preservation of Bartram's Garden through the pages of his influential weekly, *Garden and Forest*. At the same time, proponents of this movement established a volunteer

²⁸⁰ Thomas Meehan, "The Old Botanic Garden of Bartram," *The Gardener's Monthly* 27 (Jan. 1885): 26.

²⁸¹ S. Mendelson Meehan, "A Brief Sketch of the Life of Thomas Meehan," 18; Oberle, "The Influence of Thomas Meehan" (1999), 22-23.

Thomas Meehan, "Bartram Gardens: How They May be Secured by the City to the Public Uses," *The Philadelphia Press*, (Sunday, September 21, 1884), 11; Meehan "The Old Botanic Garden of Bartram," 26–27.

²⁸³ Philadelphia City Ordinance, July 2, 1888: 217, Philadelphia City Archives.

²⁸⁴ Charles Sprague Sargent, "Bartrams' Garden," Garden and Forest 2 (Feb. 20, 1889): 86; "Notes," Garden and Forest 2 (Mar. 6, 1889): 120; "Notes," Garden and Forest 2 (Mar. 27, 1889): 156; Garden and Forest 2 (Apr. 10, 1889): 180.

organization, the City Parks Association, to aid in the creation, management, and funding of the new parks. Early in 1889, the city appropriated funds to purchase an eleven-acre piece of the Eastwick estate containing the bulk of the historic Bartram garden and the house. Although the property's purchase was not fully settled until 1893, the city council passed an ordinance authorizing immediate opening of the Bartram Park in late autumn 1890, with a three month notice to the owners. The city took charge of the historic house and garden on Friday, March 13, 1891 and appointed a superintendent. In May 1893, the deed of purchase for the property was recorded for two tracts, 8.74 acres including the house, garden, and outbuildings, and 2.34 acres, a small rectangular piece to the northwest of the railroad cut. The purchase price paid to the Eastwick estate was \$41,661.

From the start, there were obvious problems with Meehan's plans for the preservation of Bartram's Garden, the most obvious being its small stature. When selected for preservation in 1891, the city intended Bartram's Garden to be a "small park" set within a dense area of urban development. With a minimum of foresight and a maximum of thrift, only a small portion of the original Bartram family property was cut from the surrounding open land and marked for preservation, and uncontrolled development soon left the historic garden cut off from residential neighbors and choked by industrial growth on all sides. Only the recent demise of these industrial neighbors has made it been possible to enlarge the park. A second issue concerned the decade of neglect following the death of Andrew Eastwick, which turned what was left of the Bartram botanic garden into an overgrown arboretum and obscured much of what both visitors and caretakers revered during the past century.

The citizens and government of Philadelphia did not know how to deal with these newly created parks, which had little or no staffing, and no budget. The 1891 annual report of the City Parks Association stated: "the people are not yet, however, fully alive to the importance of these open spaces, and that the temptation to employ our city parks for other than their legitimate and proper uses." And there was virtually no precedent for the public preservation of historic sites or historic gardens in Philadelphia, or any city for that matter, Sargent feared the result:

The land should be acquired in such a way, or on such terms, as would permit some permanent special supervision of it by some body of men who would be specially interested in the historic character of the place—the University of Pennsylvania, or the Academy of Natural Science. If it becomes merely one of

²⁸⁵ First Annual Report of the City Parks Association, 1888 (Philadelphia, 1889).

²⁸⁶ Philadelphia City Ordinance, March 12, 1889: 141.

²⁸⁷ Philadelphia City Ordinance, November 29, 1890: 400-401.

²⁸⁸ "Bartram's Garden," *Philadelphia Public Ledger* March 16, 1891.

²⁸⁹ Philadelphia City Records, Deed Book TG-316-257.

²⁹⁰ Fourth Annual Report of the City Parks Association [for the year 1891] (Philadelphia, 1892), 3.

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the city parks, under the general management of some branch of the city government, it would inevitably lose all its distinctive or special character and interest. ²⁹¹

True to Sargent's concerns, for close to a century Bartram's Garden was "merely one of the city parks."

Despite uncertain plans for approaching its care, momentum to at least enlarge Bartram Park was underway soon after its creation. In September 1895, a committee of councils recommended the purchase of sixteen acres of the Eastwick property to the south of the existing garden park along the river. Lydia Eastwick had died in December 1890, and no surviving members of the Eastwick family resided in the now-aging Bartram Hall. The large house, standing only 300 feet from the John Bartram House, had been subdivided and occupied by three families. On the night of May 29, 1896, a fire destroyed the roof and part of the third story. 292

Only three months prior, the city councils approved the purchase of Bartram Hall and sixteen surrounding acres. At the time of the fire, deliberations on the appropriation of funds to purchase the property were well under way; on June 3, 1896 the city approved an appropriation for the property's purchase and an additional \$5000 for restoration of the John Bartram House. House Property took almost a year and was finally settled in Common Pleas Court in May 1897. The deed of June 17, 1897 recorded that the tract contained a total of 16.213 acres valued at \$75,000. Unfortunately, the Eastwick house, Bartram Hall, was not repaired and late in 1897 the Bureau of City Property, which controlled the site, took bids for the demolition of the house; the remains of Bartram Hall were razed by early spring 1898.

At the time that the city acquired the garden property, the neighborhood had already changed and the bucolic setting of the Bartram, Carr, and early Eastwick days was largely gone. Up to the 1850s, most of what had been Kingsessing Township survived in large parcels held by farmers, market gardeners, and plant nurseries. Following the 1854 consolidation of the previously separate Philadelphia city and county into a single municipality, Kingsessing became part of the 24th Ward, which contained all of West Philadelphia. In 1866, the lower half of West

²⁹¹ Charles Sprague Sargent, "Bartrams' Garden," Garden and Forest 2 (Feb. 20, 1889): 86.

²⁹² "A Noted House Burned," *Philadelphia Public Ledger* May 30, 1896; "The Eastwick Mansion on Fire," *Philadelphia Press* May 30, 1896.

²⁹³ Philadelphia City Ordinance, February 28, 1896: 55.

²⁹⁴ Philadelphia City Ordinance, June 3, 1896: 140.

²⁹⁵ Philadelphia City Records, Deed Book WMG-192-155.

²⁹⁶ "Improving Bartram Garden," *Philadelphia Record* Dec. 14, 1897; City Parks Association, Philadelphia, *Annual Report of the City Parks Association* (1898), 6.

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Philadelphia became the 27th Ward, and in 1898 the southern part of this ward, roughly old Kingsessing Township, became the 40th Ward of the city. With the 1854 completion of municipal consolidation, the city Department of Surveys extended the established street grid over the newly added wards. As in most previously independent and sparsely settled townships, the new grid bore little or no relation to established topography, property divisions, or existing roads and lanes in Kingsessing. Two planned streets paralleling the Schuylkill River, "Bartram Street" and "Botanic Street," would have cut through the historic garden, with the projected Bartram Street and an extended 54th Street intersecting at the site of the John Bartram House. The tight street grid planned for Kingsessing was never fully implemented, particularly in marshy areas along the river shore where railroads interfered with the street plan or where large estates, such as the Eastwick's former estate, were not immediately subdivided. Additionally, most riverfront land was relegated to industrial use as a large and growing petro-chemical industry appeared along the lower Schuylkill. By the late 1870s, several oil refineries were located on the land just south of the Bartram-Eastwick tract, with large rail yards bounding the property to the north. To make matters worse, the railroad cut first created in 1838 was increasingly enlarged.

One major factor in the transformation of the lower Schuylkill River from a neighborhood of gardens, suburban retreats, and small farms to a heavily industrialized petro-chemical preserve was the condition of the river itself. By the 1870s, it had become nothing less than an open sewer, unpleasant at best and a health threat at worst. In the summer months the dam upstream on the Schuylkill at Fairmount retained almost all of the water for distribution through the city water system. The City Parks Association described the conditions in 1902:

during the hottest summer months...sewers empty into it [the Schuylkill] either above or below Bartram's Garden, and owing to the small amount of water that there is in the lower portion of the river during these months, the polluted water flows backwards and forwards through the channel and is likely to cause and has caused malaria. But this condition cannot last, it is rapidly becoming intolerable.²⁹⁹

Despite identification of this problem early in the twentieth century, these unfortunate conditions, especially for Bartram Park, were not alleviated until the 1970s.

After the Bartram Park reached twenty-seven acres in 1897, there were moves to increase its size with additional purchases from the Eastwick estate, which remained undivided and surrounded the public park. As early as 1895 there had been calls in city newspapers to acquire more land, and in June 1898 the City Parks Association advocated the purchase of an eleven-acre triangle of

 $^{^{297}}$ John Daly and Allen Weinberg, $Genealogy\ of\ Philadelphia\ County\ Subdivision,\ 2^{\rm nd}$ edition (Philadelphia, 1966).

²⁹⁸ J. D. Scott, *Atlas of the 24th & 27th Wards, West Philadelphia* (Philadelphia, 1878), plates 3 and 4; William G. Baist, *Atlas of West Philadelphia*. *24th & 27th Wards* (Philadelphia: J. L. Smith, 1886), plates 28 and 30.

²⁹⁹ City Parks Association, Annual Report of the City Parks Association (1902), 36

the Eastwick land to the north bounded by the railroad. One aim of this enlargement was to provide an entrance to the garden that was more accessible to residents of the city and tourists, a problem that still exists today. Unfortunately, the plans to enlarge the garden park were lost in a larger scheme to develop a parkway along the west bank of the Schuylkill River from Walnut Street to Bartram's Garden. This parkway would have connected a number of existing and planned parks into a single connected strip like the East and West River Drives within Fairmount Park. Proposals for this development were quite elaborate, with study plans prepared by Zantzinger, Borie and Cret, occurring concurrently with planning for the Benjamin Franklin Parkway. This parkway never moved beyond the proposal stage, and the chance to expand the garden park was lost. The triangular tract to the north was sold for industrial uses, and for many years was the site of a company manufacturing cement; not until the 1980s was it acquired by the city for expanding the park. As to the other remnants of the Eastwick grounds, as late as 1935 the land to the west of the garden park between the railroad and Elmwood Avenue was leased by the estate to a farmer for active cultivation. The same accessible to residents of the same accessible to residents of the same accessible to residents of the categories.

Preservation as City Property: Maintenance, Restoration, and Interpretation

After the city acquired the Bartram House and Garden in 1891, it allocated only the bareminimum for its maintenance and restoration. The city pledged to provide a superintendent and guard for the property, but as late as 1899 none had been assigned. In that year, Robert J. Rule, a previous Eastwick tenant, and his family moved into the historic house and assumed the role of caretaker. Upon purchase, the garden area held by the city was not farmed, and because of this the large complex of outbuildings was largely abandoned. The absence of a standing appropriation hampered efforts to maintain and interpret the site. The city provided the park with an appropriation of \$5000 in 1896, but there is no evidence as to how this money was spent; three years later, the city provided a further \$2000, again with no evidence as to how it was used. The garden's path system was apparently rebuilt between 1904 and 1907, stemming from \$20,000 earmarked by the city for the "restoration of Bartram's Garden."

 $^{^{300}}$ Philadelphia Sunday Press Oct. 20, 1895; "At Bartram's Garden," Philadelphia Public Ledger Jun. 7, 1898.

³⁰¹ City Parks Association, Annual Report of the City Parks Association (1903) and (1907).

³⁰² Mrs. Bayard Henry to John Bartram Association membership, May 27, 1936, JBBSCL.

³⁰³ Philadelphia Record May 8, 1899.

³⁰⁴ John W. Harshberger, *The Botanists of Philadelphia and Their Work*. (Philadelphia: T. C. Davis & Sons, 1899), 60.

³⁰⁵ City Parks Association, Annual Report of the City Parks Association (1899), 5.

³⁰⁶ Annual Report of the City Parks Association 16 (Philadelphia, 1904), 9; "Bartram's Garden Saved," Old Penn Weekly Review 2 (Jan. 16. 1904): 2; Elizabeth O. Abbot, Bartram's Garden, Philadelphia, Pa. John Bartram (Philadelphia: The John Bartram Association, 1904), 9; Abbot, Bartram's Garden, Philadelphia, Pa. John Bartram, 2nd edition (Philadelphia: The John Bartram Association, 1907), 18, reissued with new garden plan

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decade later in 1918, \$10,000 was provided for new walks, resodding, and a new baseball diamond and tennis courts in the park's southern section. A press release from the Bureau of City Property in September 1918 reported the "Old Bartram House Restored By City," but it is unlikely any of this money was spent on the Bartram House. The *Philadelphia Inquirer* reported in that month:

In preparing the plans for the improvement of the famous park, Director Datesman included provision for a baseball diamond and tennis courts. This was done at the suggestion of many prominent persons who are interested in the park and who thought that with these added features the place would be more attractive to the younger generation.³⁰⁸

The "prominent persons" interested in Bartram's Garden had lobbied for the restoration of the Bartram house and garden year after year to no avail. In 1893, the John Bartram Association became a voice for the preservation and interpretation of Bartram's Garden. The Bartram family held a large reunion at the garden June 8, 1893, a successful event assured an active future for the organization. The first reunion was followed with several decades of yearly reunions and meetings by the Association. They allied themselves with the University of Pennsylvania, in particular John Muirhead Macfarlane, professor of botany and director of the University's botanic garden. In the autumn 1895, Macfarlane directed some of the initial maintenance work at the garden, stating in an 1896 letter:

The Bartram garden was bought from the Eastwick heirs 5 years ago by the City. Like many other city acquirements beyond the centers of population no progress was made till a few months ago. In the fall, Provost Harrison of our University approached the city officials, and offered to use his influence in having matters advance. He was ably seconded by Mr. Talcott William of the "Press"—who has steadily advocated the restoration of the place—and by his secretary Mr. Ellicott.

...I willingly consented, as a labor of love, to give my advice and direct the workers. A small sum only being available a the close of the financial year, a few men were started to clear off the decayed stumps and wood, to thin out young growths that interfered with the fine old specimens, to removed judiciously all dead ugly limbs, to rebuild broken parts of the dry stone wall, and to clean the ground for future work...The majority probably of the orchard trees—cherries

³⁰⁷ City Property Scrapbook, vol. 3, Philadelphia City Archives.

^{308 &}quot;Old Bartram House Restored By City," Philadelphia Inquirer Sep. 29, 1918.

³⁰⁹ "The Bartram Family," *Philadelphia Public Ledger* Jun. 9, 1893, 7; "To-day's Reunion of the Bartrams," *Philadelphia Inquirer* Jun. 8, 1983; *Bartram Family Reunion* (Philadelphia: John Bartram Association, 1893), 4-5.

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excepted—are of John and William Bartram's plantings, since one or two stumps that we have removed and that were about the size of living ones had from 120-160 rings. 310

In 1898, under the leadership of Mrs. C. Bartram Newbold, the John Bartram Association established a "Bartram Memorial Library." This collection of American botanical works published between 1750 and 1850 was initially housed in the Bartram House; however, fear about the books' safety and the fact that the house was rarely open to the public led to a stewardship agreement with the University of Pennsylvania. For a number of years, the university housed the books in a special case located in the botany department, and fundraising events were held to increase the collection. ³¹¹

Through 1923, under control of the Bureau of City Property, Bartram Park enjoyed no regular funding. Interpretive and preservation work occurred only through gifts, special appropriations, or by funds raised by the City Parks Association and the John Bartram Association. A 1915 *Philadelphia Public Ledger* article recorded the park's neglect with photos bearing these captions:

"Decay and Desolation Mark Pathways Through Bartram's Famous Garden"

"Rotting Trees, Barren Plots and Stagnant Pools Mutely Recite City's Neglect of Park Which Was Once a Botanical Wonder—Walks Are Turning Into Ditches"

"Bartram's Garden begs for care. Gashed by the elements, unkempt and little headed, it stands, in name a city park: in fact, a mute reproach to the municipality" ³¹²

"Specimens of Nearly Every Plant in Eastern North America Have Disappeared from Lovely Garden John Bartram Made Famous" ³¹³

Because unreliable funding sources threatened the survival and enjoyment of the site, beginning ca. 1920, the John Bartram Association and the City Parks Association petitioned to have Bartram Park placed under the control of the Fairmount Park Commission. In August 1922, the *Public Ledger* ran a series of daily articles for a week that highlighted the severe lack of care at the

³¹⁰ John M. Macfarlane to Mira L. Dock, March 5, 1896, John Bartram Association Collections, JBBSCL. Mira Dock was one of the first females to study botany at the University of Pennsylvania, and was a frequent lecturer on Bartram history during the 1890s. She prepared an article on the garden for *Garden and Forest* in 1896, entitled "Bartram's Garden Today," *Garden and Forest* 9 (Mar. 25, 1896): 122–125.

³¹¹ "The Bartram Memorial Library," *Old Penn Weekly Review* 1 (Dec. 5, 1902). By the 1950s, Penn had disbanded this special library and moved its books into the general library collection. Many of the volumes can still be found in the Van Pelt Library stacks and at the Special Collections Department.

³¹² "Decay and Desolation Mark Pathways Through Bartram's Famous Garden," *Philadelphia North American* May 7, 1903.

³¹³ "Specimens of Nearly Every Plant in Eastern North America Have Disappeared from Lovely Garden John Bartram Made Famous," *Philadelphia Public Ledger* June 28, 1915.

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park, which asked: "have Philadelphia and Philadelphians forgotten John Bartram." This series appears to have stirred renewed interest in the garden and its historical importance, and the following year municipal control of the site shifted to the Commissioners of Fairmount Park. Individuals involved in lobbying fro the garden at this time included: Samuel Newbold. Baxter, chief landscape architect for Fairmount Park, John W. Harshberger and John M. Macfarlane, both professors of botany at the University of Pennsylvania, Mrs. Charles Custis Harrison, wife of the provost of the University, Anna K. Cadbury, secretary of the John Bartram Association, and Mrs. Bayard Henry (Jane Irwin Robeson Henry), longtime president of the John Bartram Association.

From 1919 to 1921, Horace Wells Sellers of the Philadelphia Chapter of the American Institute of Architects (AIA) undertook the first detailed architectural study of the John Bartram House. The Existing-conditions plans by Gabriel B. Rothkugel, a historic structures report by Ralph L. Colton, and an outline of restoration were all completed by 1921, but movement in this direction had to wait until the transferal of control to the Fairmount Park Commission. Finally, in August 1923, Bartram Park was removed from Bureau of City Property jurisdiction and moved to the Fairmount Park Commission. Restoration work commenced in December 1924 under joint oversight by the AIA, the Fairmount Park Commission, the John Bartram Association, and other Philadelphia groups including the Pennsylvania Horticultural Society, the Philadelphia Garden Club, the City Parks Association, and the Art Jury. The individuals most active in the mid-1920s restoration efforts, both the house and garden, were Mrs. Charles Custis Harrison of the John Bartram Association and Horace Wells Sellers of the AIA. Under their efforts and others, work steadily continued through completion in late October 1925, in time for the 1926 Sesquicentennial celebration in Philadelphia. Following the house's restoration, the

^{314 &}quot;Bartram's Garden Passing Into Decay," *Philadelphia Public Ledger* Aug. 6, 1922: 6; "Valuable Furniture Going to Decay Since City Closed Bartram Mansion," *Philadelphia Public Ledger* Aug. 7, 1922: 2; "No One Sponsors Bartram's Garden," *Philadelphia Public Ledger* Aug. 8, 1922: 2; "Bartram Neglect Blamed on City," *Philadelphia Public Ledger* Aug. 9, 1922: 3; "Who Owns Bartram Park?" *Philadelphia Public Ledger* Aug. 9, 1922: 2; "Old Bridge Menaces Lives of Bartram Park Visitors," *Philadelphia Public Ledger* Aug. 11, 1922: 2; "Bartram Gardens," *Philadelphia Public Ledger* Aug. 13, 1922: 11.

³¹⁵ Philadelphia City Ordinance, August 31, 1923: 274-275; "Rule Bartram's Gardens," *Philadelphia Bulletin* Aug. 30, 1923.

³¹⁶ Philadelphia Bulletin Oct. 20, 1919.

³¹⁷ Philadelphia Bulletin Jul. 26, 1923; Aug. 30, 1923; Sep. 3, 1923.

³¹⁸ Horace Wells Sellers Collection, 1921–1925, folder #33, map folder #40, Independence National Historical Park, Philadelphia, Pennsylvania.

³¹⁹ "Historic Bartram House Is Restored," *Philadelphia Public Ledger* Oct. 25, 1925; "Bartram's Home Opened to Public," *Philadelphia Public Ledger* Jun. 9, 1926.

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garden's extensive replanting took place during the summer 1926, including an entire railroad freight car of rhododendrons, kalmias, and azaleas.³²⁰ Little or no work was done to the outbuildings at the garden at this time.³²¹

Following this first large-scale restoration, the Fairmount Park Commission undertook a degree of yearly maintenance, which was recorded in their Annual Reports. The replanting program begun in 1926 continued through 1931, culminating in a celebration in honor of the 200th anniversary of Bartram's Garden. 322 From 1933 through 1936, depression-era funding sources from various agencies provided employment for a large labor force. This work centered on regrading and rebuilding the athletic fields in the south meadow and hard-surfacing the paths in the historic garden. In 1940, the Historic American Buildings Survey sought to include Bartram's Garden as part of its pioneering national recording efforts. On account of the massive number of buildings in Southeastern Pennsylvania viewed as deserving for inclusion, the early Survey took an expedient, and at the time common, route for recording the house at Bartram's Garden. Instead of producing new drawings, HABS took the measured, albeit rectified, drawings completed in 1921 for the house's initial restoration and copied them onto sheets bearing the HABS title block.³²³ While at the time the source for this documentation measured drawings produced by the AIA for restoration purposes—was understandably not problematic, by the time that HABS used them, post-restoration, the structure's physical features had already changed. As with the reconsideration of any past preservation method, this process is fully open to reinterpretation and at times criticism, indeed HABS revisited the house with a measured drawings project in 2001, but the period intent should still be viewed in context as positive overall and shows that historically-minded people viewed Bartram's Garden as a nationally significant site.

After the flurry of activity in the 1920s and 1930s, few significant preservation campaigns occurred after World War II in the 1950s and 1960s. Although Fairmount Park supported on-site maintenance staff, responsibility for site interpretation rotated among garden clubs of the Philadelphia area. A small number of individuals remained involved as members of the John Bartram Association board, but they did not even meet at the garden; only a few interested individuals were active on-site, including: Francis Darley West, Edward Wildmann, Robert Campbell, Emily Cheston, and Meg Evans. While the need for a master planting and restoration plan was realized, during more than a decade of requests, actual funding or even a commitment for funding were not forthcoming from the Fairmount Park Commission. Robert Campbell, a

³²⁰ "Cash Book of the John Bartram Association," October 1, 1911—June 25, 1934, 81, 84, JBBSCL.

³²¹ Philadelphia Public Ledger Mar. 22, 1927.

³²² Samuel N. Baxter, "Restoration of Plants in Bartram's Garden by the Fairmount Park Commission of Philadelphia," *Bartonia*, supplement to no. 12 (Dec. 31, 1931): 38–50.

³²³ This approach was particularly pervasive in Southeastern Pennsylvania because of a similar recording project locally initiated in 1932 under the title "Old Philadelphia Survey," which was conducted by the Philadelphia Chapter of the American Institute of Architects. For example, William Hamilton's eighteenth-century estate house at The Woodlands, just a little north of Bartram's Garden along west bank of the Schuylkill River, also initially entered the Survey in this manner.

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landscape architect working in Philadelphia, recorded the slow decline of the site in the early 1950s:

When I came to live in the Philadelphia, a little over thirty years ago, I had probably never heard of John Bartram and when, soon after, I visited the Garden it was simply to see another park and learn something from it; I was, however, agreeably surprised to find quite a variety of plants, some even identified by labels. From time to time I returned to the Garden but by the spring of 1953, I was convinced that unless something was done to replace the annual loss amongst the plants and preserve the character of the Garden that further visits would be of little value to me and, no doubt, to others with similar interests. 324

With his anxiety about the site, Campbell approached the Fairmount Park Commission and they, in turn, directed him to the John Bartram Association, and particularly Francis West, who was at the time its vice president. At Campbell's instigation, in late autumn 1953, the local chapter of the AIA and the Philadelphia section of the American Society of Landscape Architects each appointed two representatives to serve on the executive committee of the John Bartram Association for assistance in the restoration and preservation of the house and garden. Much of what was done to the site during this period are now viewed as small victories. For example, in the summer 1955, modern restrooms were installed in the north wing of the John Bartram House, a necessary amenity for a public site, but unfortunately gutting what remained of the historic summer kitchen wing.

From 1955 to 1967, Campbell strove to make some progress at the site, in specific regard to the garden. The ca. 1955 discovery of the 1758 "Draught" of the house and garden among Peter Collinson's papers at Knowsley Hall in the United Kingdom revived interest in the possibility of restoring the garden to its colonial appearance, as well as demonstrating the many changes that occurred at the site over the course of two centuries. With renewed energy, Campbell also worked on a permanent planting plan for the garden. In 1957, Campbell prepared a sketch plan for interpretation and planting at the site as a "guide to planners." One year later, post and rail fences were installed to the east of the house to in an attempt to mark the northern and southern boundaries of the garden visible in the 1758 "Draught," and in 1959 and 1960, some new planting occurred. August 1960 saw 1000 copies of a "sketch plan" of the site printed as a "provisional guide to the garden" in hope that the Fairmount Park Commissioners would authorize preparation of a permanent plan, either by their own staff or through outside contractors. With no funding forthcoming from this effort, Campbell continued to work on his own plan through 1967, although this work remained slow in part because Robert Campbell

³²⁴ Robert Campbell, "A Report to the John Bartram Association Accompanying A Guide to the Garden Plan Dated September 1967," recorded in the minutes of the Executive Committee of the John Bartram Association, Dec. 1967, 3–4, JBBSCL.

³²⁵ Povey, "Garden of a King's Botanist," 1956: 549-550.

³²⁶ Robert G. Campbell, *John Bartram, William Bartram: Their House and Garden...Sketch Plan Prepared by the John Bartram Association as a Provisional Guide to the Garden* (Philadelphia: The John Bartram Association, 1960).

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had moved from Philadelphia to North Carolina in late 1955. He reported on this work to interested parties in December 1967, and in 1969 the John Bartram Association printed and distributed it as the garden's "permanent" plan. 327

Campbell hoped that this plan would be corrected over time, stating: "it is very important for the success of this plan that each of you during the course of the next few months, not years, make corrections;" corrections on the printed version would be returned "for inclusion on the original drawing, which I shall then pass over to the Association for safe keeping." This transfer likely never happened, and the present location of Robert Campbell's originals remains unknown. As a whole, Campbell's efforts worked toward two contradictory aims—to record the existing plantings in the historic garden and to interpret the Bartram family's work through a permanent set of plantings, largely trees. The major design criterion of the plan was one hundred percent tree cover for the entire historic garden. The idea that permanent plantings would all be replaced one-for-one would likely have proven untenable in practice, and given the state of funding and maintenance at the site in the late 1960s, it is not surprising the plantings on Campbell's final plan were never fully implemented.

Planning for the Bicentennial of the United States in 1976 lead to renewed interest in Bartram's Garden. For the first time, significant research on the complex history of the Bartram family site began in earnest and over time a body of evidence related to the property, its structures, and personalities was brought together. In 1975, research began in preparation for a more thorough restoration of the John Bartram House and Garden. The more recent work included an archaeological feasibility study; a historic structures study of the Bartram House, and an archaeological and historic structures study of the Seed House outbuilding. Archaeological investigation at the garden began with a field school in the summer and autumn 1980, under the direction of Dr. Robert L. Schuyler of the University of Pennsylvania.

In the autumn 1975 volunteers from the Garden Club Federation of America planted a recreated "Common Flower Garden" on the east terrace in front of the John Bartram House. While not laid out with any historic accuracy, this garden still served a very important purpose: it was the first flower garden at the site in decades, perhaps since the early-twentieth century, and it was the first attempt to interpret John Bartram's own personal garden.

³²⁷ Robert G. Campbell, *Plan of Bartram Garden* (Philadelphia: The John Bartram Association, 1969).

³²⁸ Campbell, 5–6.

³²⁹ Kenyon et al, "Basic Historic Research and Archaeological Feasibility Study of Bartram Park," 1975; Glenn, "Historic Structure Report. The John Bartram House," 1978; Michael Parrington, "Excavations at the 'Seedhouse' at Bartram's Garden, Philadelphia, 1979," Museum Institute for Conservation Archaeology, University of Pennsylvania, Philadelphia, Pennsylvania, 1979; Reed Engle, "Historic Structure Report on the Seed House, Bartram's Gardens, 54th and Lindbergh Boulevard, Philadelphia, Penna. for the John Bartram Association," Philadelphia: John M. Dickey, 1980, all JBBSCL.

³³⁰ Fry, "Archaeological Research at Historic Bartram's Garden," *Bartram Broadside* (Summer 1998).

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A second major restoration of the John Bartram House took place between autumn 1980 and summer 1981, and event that occurred concurrently with the introduction of a full-time, on-site professional staff by the John Bartram Association. In 1981, the park acquired the triangular parcel to the north along the river, known as the Warner tract, a total of seventeen-plus acres. A grant by the Land and Water Conservation Funds to Fairmount Park made the purchase possible. This land previously served as a cement manufacturing facility, excavated well below grade for that purpose, and largely covered with lime and cement waste. Several years of continuous fill were necessary to reclaim the land, completed in 1989 as the north meadow and a parking area for the park. The John Bartram Association hired the well-known landscape architect Rudy J. Favretti to prepare a professional master plan for the site, which was completed in May 1984. This plan was implemented in phases, and although now somewhat dated, it has served the garden well through the last twenty years of rapid development.³³¹

In recent years, the outbuildings have been the focus of restoration and renovation for purposes ranging from an up-to-date, climate controlled archives, a gift shop, and additional professional staff offices. Most recently, the offices once housed on the house's third floor were relocated to a new administration and maintenance structure located to the west of the railroad cut, along the entrance road from Lindbergh Boulevard. These spacious and attractive buildings greatly augment the ability of the John Bartram Association to continue pursuing a high-level of preservation, interpretation, and maintenance necessary for a site of the utmost significance to American and botanic history as it approaches a fourth century of existence.

PART II: SOURCES OF INFORMATION

General

Historical writings related to the Bartrams, the house, and the garden have been continuous from the mid-eighteenth century onward. Bibliographies of references related to John and William Bartram are available in John H. Barnhart's "Bartram Bibliography" (1931) and Rose Marie Cutting's John and William Bartram, William Byrd III, and St. John de Crèvecoeur: A Reference Guide (1976). Much of John Bartram's correspondence survives, the largest collection of original documents is housed at the Historical Society of Pennsylvania; it contains occasional descriptions of the garden and house. The first published account of the garden appeared in, Michel-Guillaume Jean de Crèvecoeur's (J. Hector St. John de Crèvecoeur) Letters of an American Farmer (1782). In a letter disguised as the work of a visiting Russian, "Mr. Iw-n Al-z," Crèvecoeur describes a meeting with John Bartram at the house and garden sometime between 1765 and 1770. Following the American Revolution and throughout the first half of the nineteenth century, a number of traveler's accounts, the Bartram family correspondence, and surviving commercial catalogues of the garden help to document the site. In 1849, William Darlington published a collated volume of much of John Bartram's surviving correspondence in work entitled, Memorials of John Bartram and Humphry Marshall. This single volume also reprints a number of early historical accounts of the garden, including Crèvecoeur's eighteenth-century

³³¹ Rudy J. Favretti, "Long Range Master Plan For Bartram's Garden, 54th Street and Lindbergh Boulevard, Philadelphia, Pa. 19143," Philadelphia, Pennsylvania, May 22, 1984, JBBSCL; "Restoring Bartram's Garden: America's Oldest Surviving Botanical Garden" *The Green Scene* 15 (Sep.-Oct. 1986): 8–13.

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description, and includes a small selection of William Bartram's correspondence, much of which is now probably lost. Darlington's work is still the single best source for Bartram history, and that of their house and garden.

During the later part of the nineteenth century, references to John and William Bartram and their garden appear in most histories of Philadelphia and Pennsylvania, and in a number of popular period magazines; however, but little new information or real research on the property occurred for these volumes. Even after the city acquired the garden as a public park at the end of the nineteenth century, contemporary guidebooks and periodicals released little new research and often distributed a great deal of misinformation. It was not until the first restoration of the Bartram house ca. 1921–1926 that any rigorous investigation of the house and garden was undertaken. The restoration work occurred largely under the control of Horace Wells Sellers of the Philadelphia Chapter of the American Institute of Architects and his nephew, Ralph Colton. The manuscript historic structures report and notes from this work are housed in the Sellers Collection at Independence National Historic Park in Philadelphia.

Continued academic interest in Bartram's Garden was sustained on account of the bicentennial of the garden's founding, roughly 1931. The Philadelphia Botanical Club devoted a special issue of their journal *Bartonia* to the Bartrams and their garden, which was published in December 1931. Beginning in the 1940s a renewed interest in the scientific contributions of both John and William Bartram led to a more systematic analysis of the surviving collections of Bartram manuscripts and related documents. Literary interest in William Bartram's *Travels...* (1791) began in the 1920s and 1930s and has spawned a range of academic works and interpretations that continue to grow (Lowes, 1927; Bryllion, 1933; Hoffmann, 1996; Cahill, 2001). Ernest Earnest completed a dissertation, entitled "The Two Bartrams," at Princeton University in 1939, which was later published in 1940. This 1940 volume was the first book-length account of both John and William Bartrams' work.

Around the same time, Francis Harper also heavily contributed to reviving interest in the botanical careers of John and William Bartram. In 1942, Harper produced an annotated version of John Bartram's travel diary through the south in 1765-1766, and one year later published William Bartram's report to Dr. Fothergill. Harper went on to research the definitive annotated version of William Bartram's Travels, released in 1958. Over the years, some of Harper's research was funded by the John Bartram Association. In the 1950s, Helen Cruickshank issued a volume (1957) of selections from the writings of John and William Bartram that also helped stimulate interest in their work. The large collection of William Bartram's drawings held by the Natural History Museum in London was published in an edition by Joseph Ewan in 1968, established general acknowledgment for William Bartram's role as an American artist. A complete booklength biography of John Bartram was compiled by Edmund and Dorothy Berkeley in 1982; ten years later they followed this endeavor with a fairly complete edition of John Bartram's correspondence (1992). It is now common for new books and articles on John or William Bartram appear yearly. William Bartram's output of manuscripts is slowly appearing in print. His works on the Southeastern Indians were gathered together in 1995 (Waselkov and Braund ed., 1995). Tom Slaughter issued an edition of Travels... and several of his smaller works through the American Library series (1996), and in that same year also produced a dual biography of John

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and William Bartram. Recent works have appeared on the Bartrams and the rhetoric of natural history (Regis, 1992), and the "poetics of natural history" (Irmscher, 1999), and William Bartram and the American Revolution (Cashin, 2000).

The firm of John M. Dickey AIA prepared a second historic structures report for the John Bartram House in 1978, authored by Marsha Glenn. This report preceded a second restoration of the Bartram House in 1980-1981. A manuscript historic structures report on the "Seed House" outbuilding was also prepared during this restoration work (Engle, 1980). Beginning in 1975, controlled archaeological excavation played a part in research at the Bartram site. A brief excavation in 1975 confirmed a prior central path in the main garden terrace east of the Bartram House (Kenyon et al, 1975). The architectural survey work prior to the 1978 Historic Structures Report included archaeology within and around the house conducted in the summer and autumn 1977 (Glenn, 1978, vol. 2, appendix III). In June and October 1979, excavations were undertaken within and around the Seed House complex by the Museum Institute for Conservation Archaeology (MICA) of the University of Pennsylvania (Parrington, 1979, 1981). A large-scale excavation organized to test several locations at the garden site proceeded the following summer as a field school of the American Civilization Department of the University of Pennsylvania, under the direction of Dr. Robert L. Schuyler. Several papers dealing with preliminary results of this fieldwork have been presented (Fry, 1986, 1987). Since 1982, the author of this report has served as an archaeological consultant to the John Bartram Association, monitoring construction work and directing several small excavations in the garden, and around the Bartram House (Fry, 1989, 1990a, 1991, 1992, 1996b, 1998).

Manuscript Sources

The Historical Society of Pennsylvania (HSP), Philadelphia, houses the "Bartram Papers", fourteen volumes of manuscript correspondence, journals, drawings, and other materials produced by John Bartram, William Bartram, and other family members, which in a highly edited form was the basis for Darlington's *Memorial* (1849). The collection's most important part comprises John Bartram's letter books, which contain copies of his outgoing correspondence and originals of incoming letters, now preserved in four volumes. Probably less than half of John Bartram's total correspondence survives, and unfortunately the extant letter books were frequently broken up and rebound out of sequence and in fragments. The HSP also holds Bartram materials in the form of letters scattered across a number of larger collections, some related botanic and horticultural collections, as graphic materials in the form of photographs and historic views of the garden, and in a small group of materials relating to Colonel Robert Carr, who married John Bartram's granddaughter, Ann Bartram, and managed the garden as a commercial nursery and plant source between 1813 and 1850.

The American Philosophical Society (APS) holds duplicates of most if not all of the Bartram papers housed at the HSP and materials scattered in archives from throughout the country in the form of microfilm and photocopies. Of variable use to interested individuals is a set of transcripts of John Bartram's correspondence at the APS prepared by Edward E. Wildman and Francis D. West, from the originals in the HSP in 1956. The APS also houses an archive of the papers of the John Bartram Association, from ca. 1896 to 1960, the organization that still maintains management of the garden site. This material contains information on changes and restoration work occurring at the garden, and several abortive research projects on the Bartrams,

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and the house and garden, including a large manuscript by Francis D. West on Bartram history, genealogy, and the history of the garden site. The APS holds a small number of original Bartram materials scattered in several collections, and a greater number of related natural history collections many of which touch on the garden in important ways. The institution also houses microfilm of William Darlington's correspondence, commenting on research that produced his *Memorials* in 1849.

Smaller collections of "Bartramiana" are found in the Philadelphia libraries at the University of Pennsylvania and the Academy of Natural Sciences. The Rare Books department of Van Pelt Library at the University of Pennsylvania houses some original Bartram manuscripts, and the surviving volumes of a "Bartram Memorial Library," organized ca. 1896, containing a small number of volumes from John Bartram's own library. This collection also holds some Bartram artifacts. The Academy of Natural Sciences similarly maintains a small collection of Bartram manuscripts, chiefly correspondence, and some Bartram artifacts. This institution also houses the Thomas Meehan Papers (1826–1901), which have not been searched but may have significant materials about the garden site. Meehan served as head gardener to Andrew Eastwick, ca. 1850-1851, when Eastwick purchased the property from the Bartram family. Meehan published his American Handbook of Ornamental Trees in 1853, largely a description of the individual specimens in the Bartram garden at that time. He became well-known in American horticulture and botany circles, and within the nursery business during the second half of the nineteenth century, largely through a monthly periodical, the Gardener's Monthly, later Meehan's Monthly. In later life, Meehan entered Philadelphia politics, and while serving on the Common Council began a movement to set aside small parks throughout the city. The city preserved "Bartram Park" among the earliest group of these reserves.

Other important Bartram collections include historic photographic and non-photographic views located in the Free Library of Philadelphia and the Library Company of Philadelphia, and in the Urban Archives at Temple University. Some archival materials on the park's operation since 1926 are found in the collections of the Fairmount Park Commission at Memorial Hall in Philadelphia. The published *Annual Reports* of the Fairmount Park Commission summarize yearly maintenance occurring at the park, including significant Works Progress Administration efforts ca. 1936–1940. Prior to 1926, the park was under the jurisdiction of the City Department of Public Property, but little in the way of primary documents survives beyond two scrapbooks of newspaper cuttings housed in the Philadelphia City Archives. Other references to the Bartram Garden in manuscript form are available in the form of the records of the City Councils of Philadelphia and their ordinances located in the Philadelphia City Archives; in the manuscript returns of the U.S. Census from 1800 to 1890; in deeds and land grants maintained in the Philadelphia County Records; in tax returns of various sorts, including provincial taxes, state, federal and local taxes; and in the wills and probate inventories of John Bartram, John Bartram, Jr., William Bartram, and Andrew Eastwick, found in the Philadelphia County Register of Wills.

Published Primary Sources

While large collections of documentary and manuscript materials exist in their original form, many parts of the documentary record relative to the Bartrams and the garden exist in published form, beginning with Darlington's *Memorials* (1849). A selection of Peter Collinon's correspondence has recently been published (Armstrong, ed., 2002). Many Bartram letters and related materials have also reprinted in the editions of the papers of Benjamin Franklin, Thomas

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Jefferson, George Washington, Cadwallader Colden, James Logan, James Madison, Manasseh Cutler, and other members of the political elite of eighteenth- and early-nineteenth-century North America. Useful background information and isolated references to the Bartrams or the garden also appear in published works and correspondence of important eighteenth- and nineteenth-century naturalists, including such Europeans as Linnaeus, Collinson, Sloane, Miller, Gronovious, Dillenius, Catesby and Fothergill, all correspondents of John Bartram, and North Americans, including: Alexander Garden, Humphry Marshall (John Bartram's cousin), Benjamin Smith Barton, Frederick Pursh, Thomas Nuttall, Henry Muhlenberg, William Bartram, Alexander Wilson, who began his bird studies with William Barton at the garden, and Joel Poinsett. A number of published travelers' accounts also provide useful descriptions of the garden including accounts of Kalm (1770), Schöpf (1781, 1787, 1788), Crèvecoeur (1782), Wansey (1796), Dunlap (1832), Cutler (1888), Douglas (1914), Barbe-Marbois (1929), da Costa (1954), and Niemcewicz (1965).

John Bartram's own published works are small and consist mostly of travel journals sent to his correspondent Peter Collinson in London (J. Bartram 1751, 1767, 1942). These accounts contain little information relating to his garden beyond references to plants, which may or may not have later been cultivated at the garden. John Bartram's other major publication was the annotation, preface, and appendix to a reprint of the third edition of Dr. Thomas Short's *Medicana Britannica*, printed by Benjamin Franklin in 1751. This work again gives hints as to plants that may have been growing in Bartram's Garden, but little specific information on the garden, house or outbuildings.

William Bartram's major work, *Travels Through North and South Carolina, Georgia, East and West Florida...*(1791), a landmark in his natural history career, also only peripherally comments on the family garden in Kingsessing. A number of reprints of this work are available; the best, annotated by Francis Harper, appeared in 1958. A large collection of William Bartram's botanical drawings created for patrons John Fothergill and Robert Barclay, now in the British museum, have been published with useful annotations relating to the history of William, and his life and work at the garden (Ewan, 1968).

Published catalogues from the garden appear from ca. 1783 into the 1830s and provide the best idea of what plants and seeds were available for sale through the garden, and probably in cultivation at the site. The first catalogue, ca. 1783, was printed in English and French versions, and is the first published botanic catalogue of any North American garden.

Historic newspapers and periodicals of the eighteenth and nineteenth centuries contain occasional materials on the Bartrams and the garden in the form of articles, advertisements, letters, and notes. Some useful examples of newspapers include Benjamin Franklin's *Pennsylvania Gazette*; Benjamin Franklin Bache's *Aurora*; Samuel Hazard's *Register of Pennsylvania*; *Poulson's American Daily Advertiser*, and *The Public Ledger*. Among periodicals, Benjamin Smith Barton's *Philadelphia Medical and Physical Journal*; John C. Loudon's *The Gardener's Magazine*; Andrew Jackson Downing's *The Horticulturalist*; R. Robinson Scott's *Philadelphia Florist*; Thomas Meehan's *Gardener's Monthly* (later *Meehan's Monthly*); and C. S. Sargent's *Garden and Forest* are particularly useful in reconstructing the history of Bartram's Garden.

Secondary Sources

A small number of secondary sources are useful for summarizing the history of the garden and the careers of John and William Bartram. Edmund and Dorothy Berkeley's biography, *The Life and Travels of John Bartram* (1982), is by far the best account of John Bartram's life and travels, although it only touches briefly on the garden itself and its later history. Two earlier biographies, Ernest Earnest's *John and William Bartram: Botanists and Explorers* (1940), and Josephine Herbst's *New Green World* (1954) also provide useful background information, especially Earnest's volume, extending from his doctoral dissertation and also dealing with William Bartram.

Although they reflect no new research and repeat a great deal of undocumented "folk history," early turn-of-the-twentieth-century guidebooks produced for the garden are of some use and interest, particularly for their period illustrations (Abbot, 1904, 1907, 1915). Emily Read Cheston's 1938 guide is a more detailed summary history but still not without its own problems; some of its more apparent errors were corrected in a second edition issued in 1953. All of these guides lack citations and reference material.

A limited number of general sources on eighteenth- and nineteenth-century gardens in Philadelphia and North America are useful in providing historic context for Bartram's Garden. These include the Pennsylvania Historical and Museum Commission's From Seed to Flower (1976), a bibliographic history of Philadelphia horticulture; Boyd et al's, A History of the Pennsylvania Horticultural Society 1827–1927 (1929); John W. Harshberger's The Botanists of Philadelphia and Their Work (1899); Ann Leighton's three volume history of American gardens (1970, 1976, 1987); and particularly useful is Elizabeth Mclean's "Town and Country Gardens in Eighteenth Century Philadelphia" (1984). There is a rising interest in the contribution of North American plants to the development of English landscape gardening, and the work of the Bartram family has been included in this research. Douglas Chambers' Planters of the English Landscape Garden (1993) and Mark Laird's The Flowering of the Landscape Garden (1999) offer a great deal of detail on the British gardens that received and propagated Bartram seeds and plants.

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PART III: PROJECT INFORMATION

The project was cosponsored by the Historic American Landscapes Survey (HALS) of the National Park Service, U. S. Department of the Interior; the John Bartram Association, Sidney Spahr, President; and Historic Bartram's Garden, Bill LeFevre, Executive Director. Assistance and other support provided by Cari Goetcheus, NPS Historical Landscape Architect. The documentation of the John Bartram Garden was undertaken by the Historic American Buildings Survey (HABS), E. Blaine Cliver, Chief of HABS/HAER/ HALS/CRGIS; under the direction of Paul D. Dolinsky, Chief of HABS. The project leaders were HABS architect Robert R. Arzola and HABS senior historian Catherine C. Lavoie, with assistance provided by HABS historian James A. Jacobs. The project was completed during the summer and fall of 2002 by landscape architecture technician David Calderon (California Polytechnic University—Pomona). The project historian was Joel T. Fry (Curator of Historic Collections, Historic Bartram's Garden). The large-format photography was produced by Joseph Elliott.